

*Third Quarter*

**FARMER  AC**

*Equity Investor  
Presentation*

*2018*

# Forward-Looking Statements

*In addition to historical information, this presentation includes forward-looking statements that reflect management's current expectations for Farmer Mac's future financial results, business prospects, and business developments. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate, or imply future results, performance, or achievements. Management's expectations for Farmer Mac's future necessarily involve a number of assumptions and estimates and the evaluation of risks and uncertainties. Various factors or events, both known and unknown, could cause Farmer Mac's actual results to differ materially from the expectations as expressed or implied by the forward-looking statements. Some of these factors are identified and discussed in Farmer Mac's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the U.S. Securities and Exchange Commission ("SEC") on March 8, 2018, and Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018, and September 30, 2018 filed with the SEC on May 10, 2018, August 9, 2018, and November 8, 2018, respectively. These reports are also available on Farmer Mac's website ([www.farmermac.com](http://www.farmermac.com)). In light of these potential risks and uncertainties, no undue reliance should be placed on any forward-looking statements expressed in this presentation. Any forward-looking statements made in this presentation are current only as of September 30, 2018, except as otherwise indicated. Farmer Mac undertakes no obligation to release publicly the results of revisions to any such forward-looking statements that may be made to reflect new information or any future events or circumstances, except as otherwise mandated by the SEC. The information contained in this presentation is not necessarily indicative of future results.*

## NO OFFER OR SOLICITATION OF SECURITIES

*This presentation does not constitute an offer to sell or a solicitation of an offer to buy any Farmer Mac security. Farmer Mac securities are offered only in jurisdictions where permissible by offering documents available through qualified securities dealers. Any investor who is considering purchasing a Farmer Mac security should consult the applicable offering documents for the security and their own financial and legal advisors for information about and analysis of the security, the risks associated with the security, and the suitability of the investment for the investor's particular circumstances.*

*Copyright © 2018 by Farmer Mac. No part of this document may be duplicated, reproduced, distributed, or displayed in public in any manner or by any means without the written permission of Farmer Mac.*



# Use of Non-GAAP Financial Measures

*This presentation is for general informational purposes only, is current only as of September 30, 2018, and should be read in conjunction with Farmer Mac's Quarterly Report on Form 10-Q filed with the SEC on November 8, 2018. In the accompanying analysis of its financial information, Farmer Mac uses the following non-GAAP financial measures: core earnings, core earnings per share, and net effective spread. Farmer Mac uses these non-GAAP measures to measure corporate economic performance and develop financial plans because, in management's view, they are useful alternative measures in understanding Farmer Mac's economic performance, transaction economics, and business trends. The non-GAAP financial measures that Farmer Mac uses may not be comparable to similarly labeled non-GAAP financial measures disclosed by other companies. Farmer Mac's disclosure of these non-GAAP financial measures is intended to be supplemental in nature, and is not meant to be considered in isolation from, as a substitute for, or as more important than, the related financial information prepared in accordance with GAAP.*

*Core earnings and core earnings per share principally differ from net income attributable to common stockholders and earnings per common share, respectively, by excluding the effects of fair value fluctuations. These fluctuations are not expected to have a cumulative net impact on Farmer Mac's financial condition or results of operations reported in accordance with GAAP if the related financial instruments are held to maturity, as is expected.*

*Core earnings and core earnings per share also differ from net income attributable to common stockholders and earnings per common share, respectively, by excluding specified infrequent or unusual transactions that Farmer Mac believes are not indicative of future operating results and that may not reflect the trends and economic financial performance of Farmer Mac's core business.*

*Farmer Mac uses net effective spread to measure the net spread Farmer Mac earns between its interest-earning assets and the related net funding costs of these assets. Net effective spread differs from net interest income and net interest yield because it excludes: (1) the amortization of premiums and discounts on assets consolidated at fair value that are amortized as adjustments to yield in interest income over the contractual or estimated remaining lives of the underlying assets; (2) interest income and interest expense related to consolidated trusts with beneficial interests owned by third parties, which are presented on Farmer Mac's consolidated balance sheets as "Loans held for investment in consolidated trusts, at amortized cost;" and (3) beginning January 1, 2018, the fair value changes of financial derivatives and the corresponding assets and liabilities designated in a fair value hedge relationship. Net effective spread also principally differs from net interest income and net interest yield because it includes: (1) the accrual of income and expense related to the contractual amounts due on financial derivatives that are not designated in hedge relationships; and (2) effective in fourth quarter 2017, the net effects of terminations or net settlements on financial derivatives and hedging activities.*



# *Table of Contents*

- 05 Executive Summary*
- 13 Farmer Mac Overview*
- 23 Appendix*





# *Executive Summary*

# Farmer Mac Overview

## Farmer Mac was created in response to the agricultural credit crisis of the 1980s

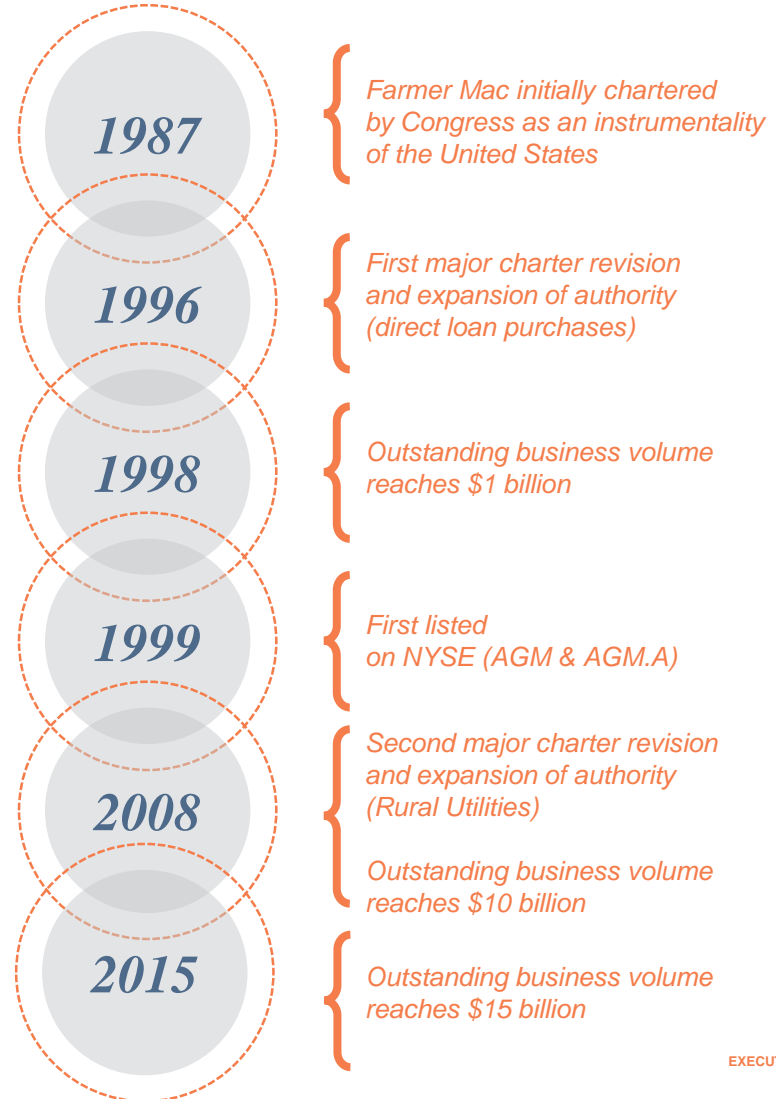
- Increases the availability and affordability of credit for the benefit of American agricultural and rural communities
- Provides financial solutions to a broad spectrum of the agricultural community

## Lines of Business

- Farm & Ranch
- USDA Guarantees
- Rural Utilities
- Institutional Credit

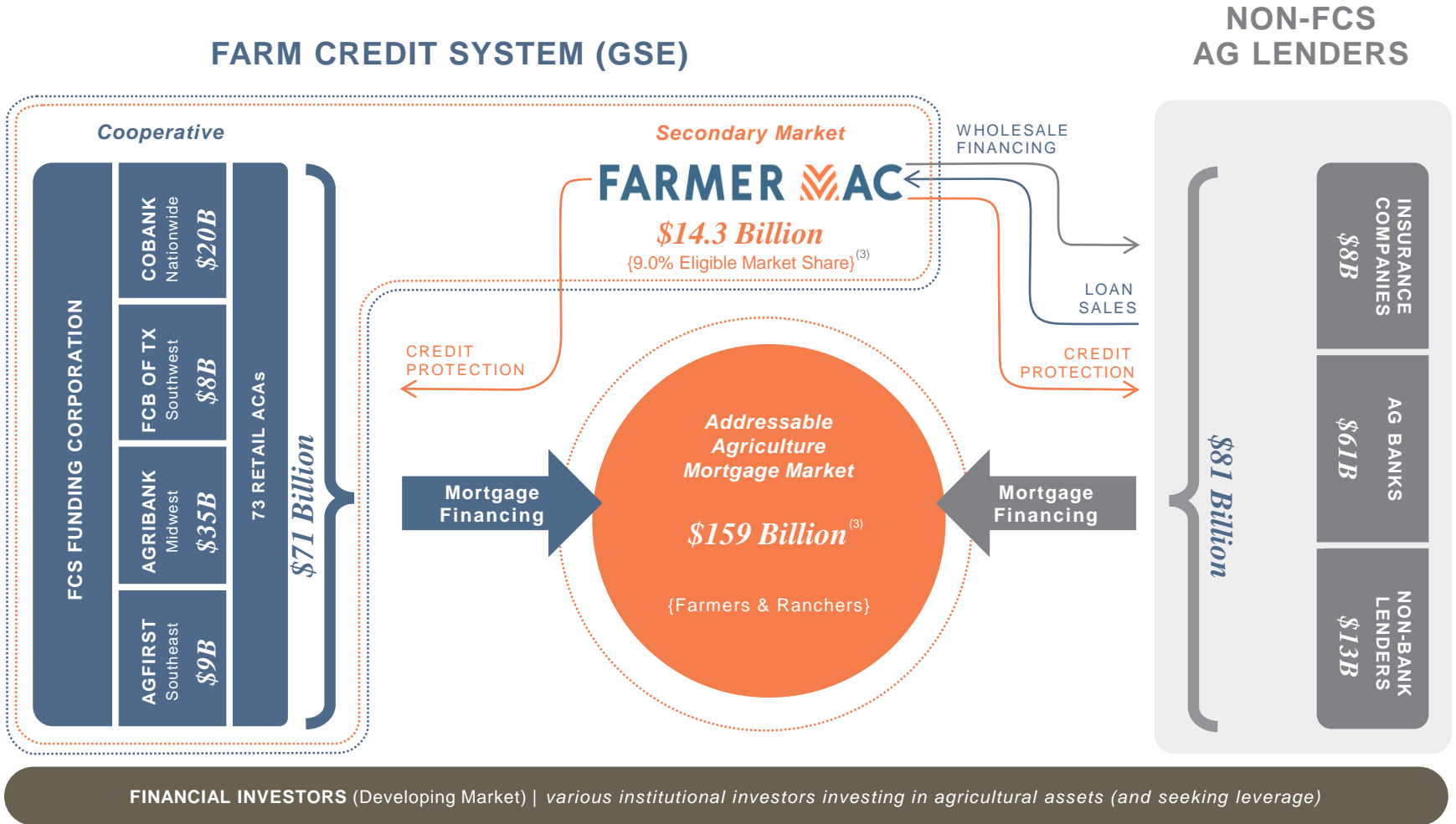
## Diverse Product Suite

- Loan purchases
- Wholesale financing
- Credit protection



# Agricultural Real Estate Mortgage Market Structure <sup>(1) (2)</sup>

AS OF DECEMBER 31, 2017



(1) Eligible ag real estate mortgage market structure shown here includes the forecast for outstanding unpaid principal balance of first lien ag mortgage assets as of December 31, 2017 reduced by forty percent to estimate the outstanding unpaid principal balance of loans that would not be eligible under Farmer Mac's lines of business.

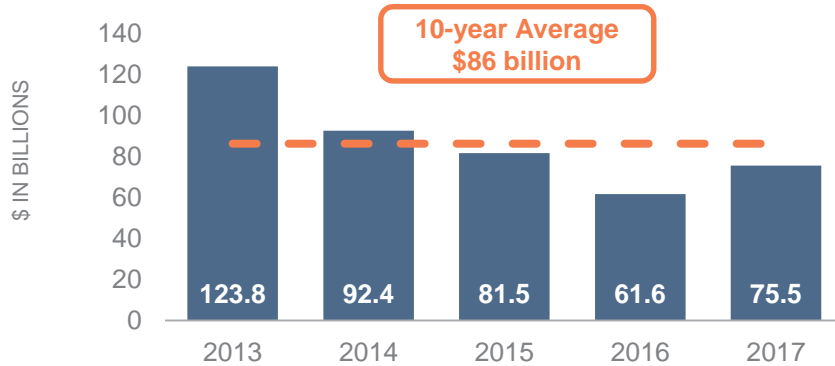
(2) Source: FDIC Call Reports (ag banks), FCA Call Report Data, and Federal Reserve Board of Governors (insurance companies and Farm Service Agency portion of non-bank lenders) data as of December 2017. USDA, Economic Research Service forecast for remaining non-bank lenders for year-end 2017 on a prorated basis. All non-FCS and FCS data adjusted for estimates of eligibility under Farmer Mac's lines of business.

(3) Sum of FCS, non-FCS, and Farmer Mac first lien ag real estate mortgage assets does not add up to the total due to the nature of Farmer Mac's business model.

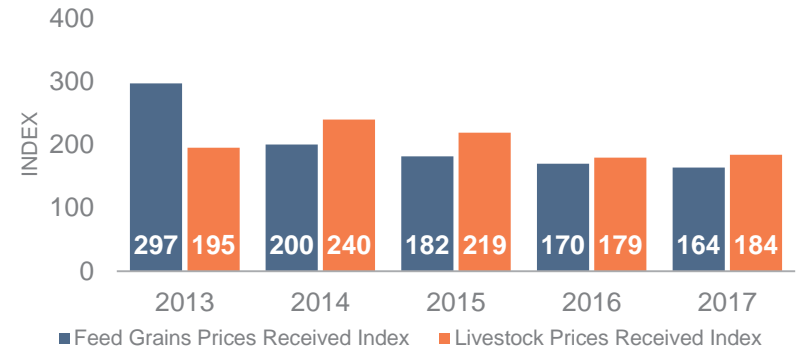


# Agricultural Industry Dashboard

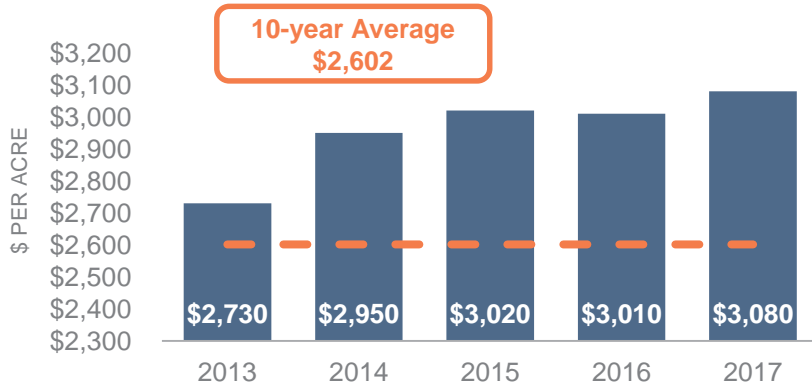
## Farm Income<sup>(1)</sup>



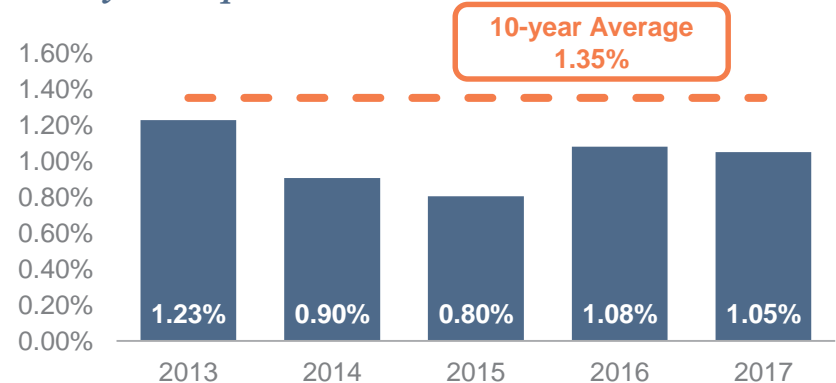
## Commodity Index<sup>(2)(3)</sup>



## Land Value<sup>(2)(4)</sup>



## 90-Day Delinquencies<sup>(5)</sup>



(1) Source: USDA, Economic Research Service, nominal dollars (as of August 2018).

(2) Source: USDA, National Agricultural Statistics Service, nominal dollars (as of September 2018).

(3) Commodity prices indexed according to 1999 base year as 100.

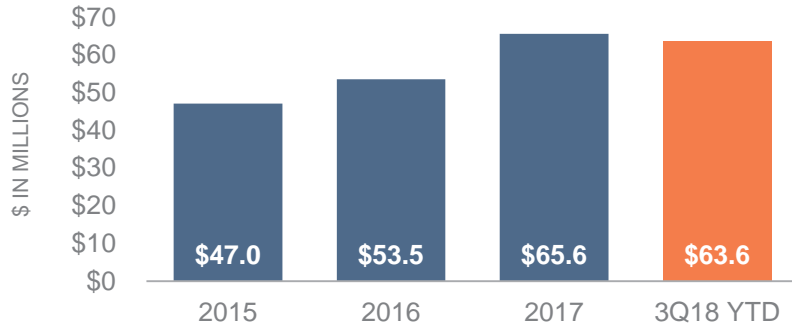
(4) Land values per acre include all farm and pasture land, irrigated and non-irrigated, as well as building and improvement values.

(5) Source: FDIC Call Report Data & Farm Credit Funding Corp Annual Information Statements – Non-accrual real estate loans and accruing loans that are 90 days or more past due made by commercial and Farm Credit System banks (as of March 2018).

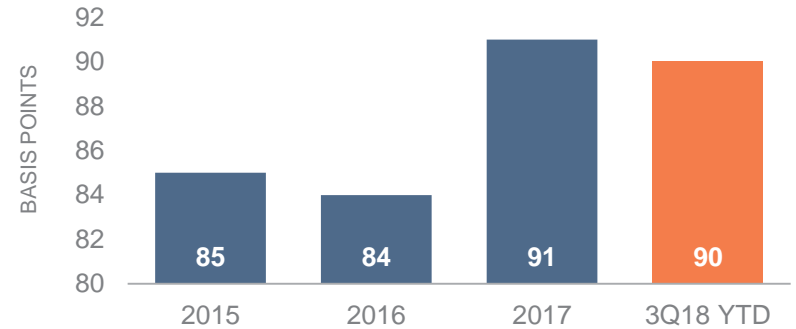


# Farmer Mac Dashboard

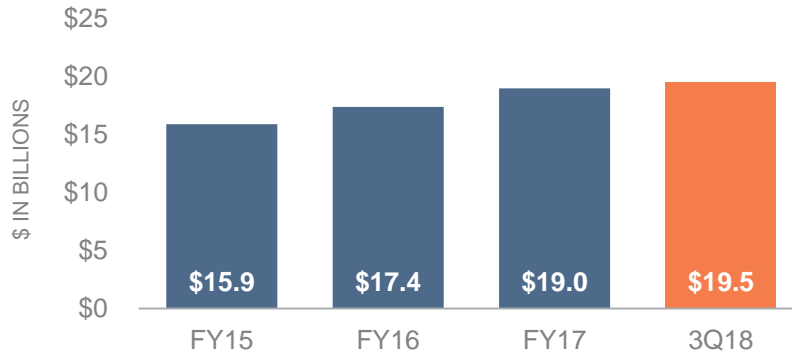
## Core Earnings<sup>(1) (2)</sup>



## Net Effective Spread<sup>(1) (2)</sup>

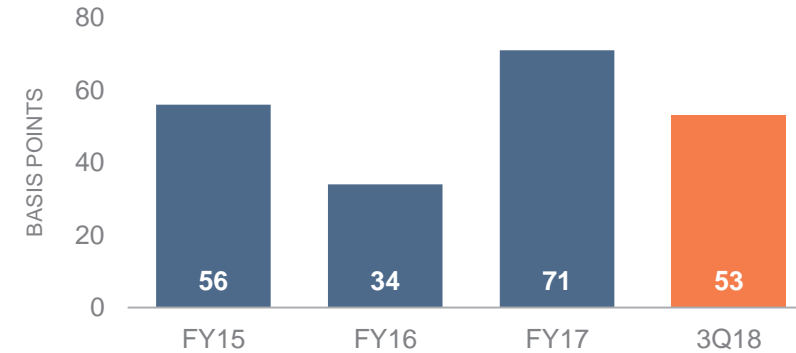


## Outstanding Business Volume



## 90-Day Delinquencies<sup>(3)</sup>

(Farm & Ranch Line of Business Only)



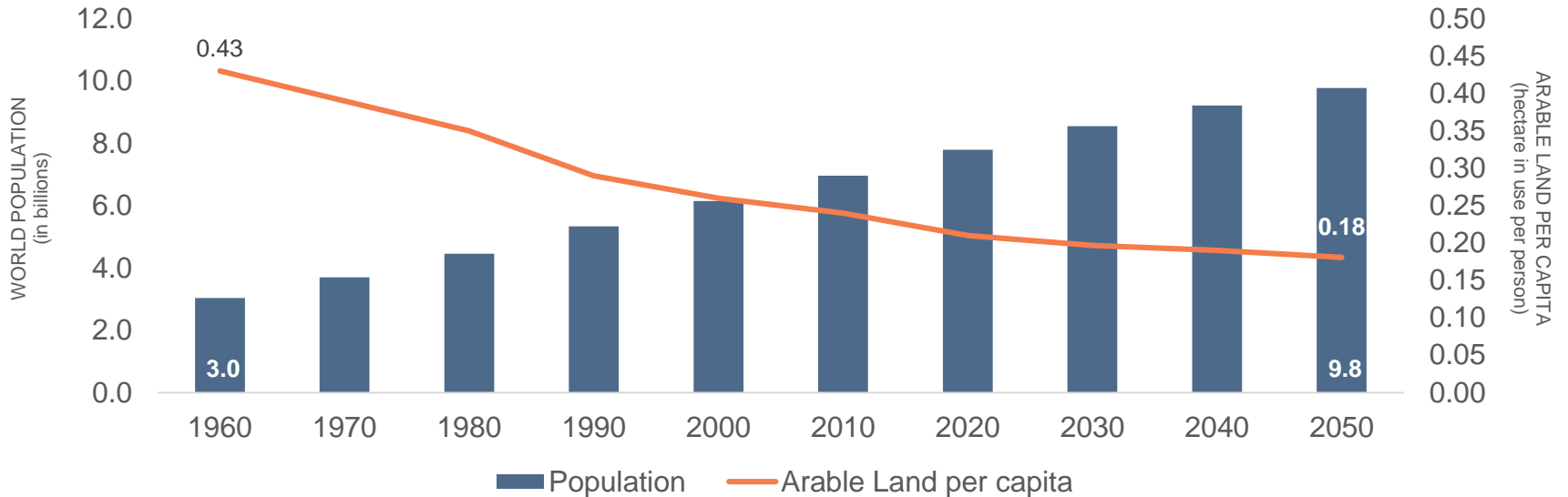
<sup>(1)</sup> Core earnings and net effective spread are non-GAAP measures. For more information on the use of these non-GAAP measures, please see page 3. For a reconciliation of core earnings to GAAP net income attributable to common stockholders and a reconciliation of net effective spread to GAAP net interest income, please refer to pages 38 and 40 of the Appendix, respectively.

<sup>(2)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.

<sup>(3)</sup> Delinquencies include loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and Long-term Standby Purchase Commitments (LTSPCs) that are 90 days or more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.



# Global Outlook – “Demand Pull”<sup>(1) (2)</sup>



**World population is expected to grow to 9.8 billion by 2050, while arable land per person is expected to decline over 40% from 2005 to 2050**

**USDA projects a 75% increase in total production and consumption of major field crops in the same period**

- 43% increase in world population
- Higher protein diets as incomes in developing countries increase

**Productivity would need to nearly double by 2050 to feed the world**

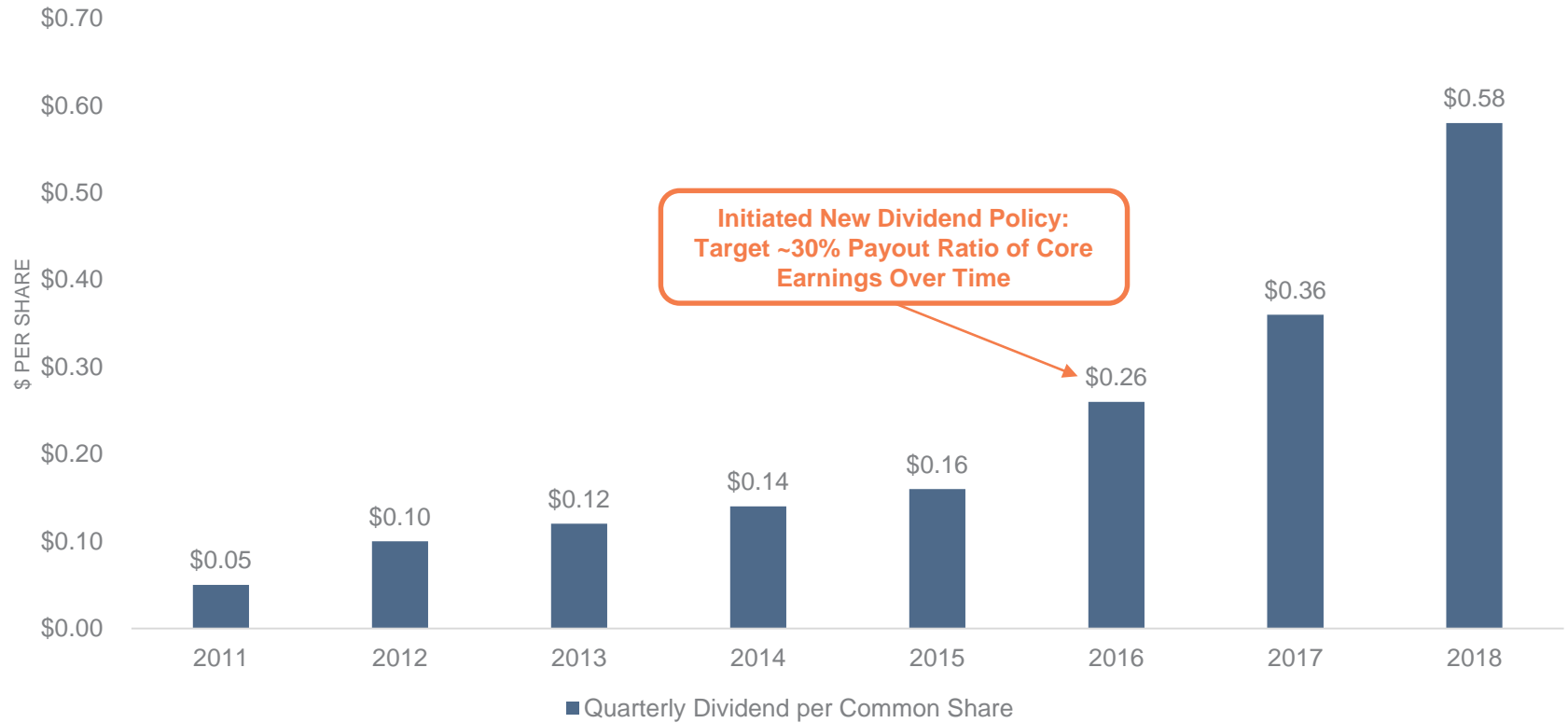
- Thus, extremely high capacity utilization
- Creating significant “demand pull” over time



<sup>(1)</sup> Source: USDA, Economic Research Service Global Drivers of Agricultural Demand and Supply, September 2014.

<sup>(2)</sup> Source: Food and Agriculture Organization of the United Nations, “World Agriculture Towards 2030/2050,” June 2012.

# Historical Dividend Growth



# Farmer Mac's Investment Highlights

## Quality Assets

- Rigorous underwriting standards
- Low delinquencies
- Low cumulative historical credit losses

## Funding Advantage

- Finance assets through issuance of low-cost public debt
- Issue at narrow, GSE spreads to U.S. Treasuries

## Growth Prospects

- Robust worldwide demand for agricultural products
- Increase market share through business development efforts
- Significant wholesale financing opportunities

## Operational Efficiency

- Overhead / outstanding business volume ~ 20 bps
- Outstanding business volume ~\$200 million per employee (99 employees)

## Consistent Returns

- Core earnings growth
- Core earnings return on equity greater than 15% throughout 2018
- Dividend policy targeted at growing payouts of core earnings to ~ 30% by end of 2018





# *Farmer Mac Overview*

# *Farmer Mac's Unique Market Position*

***Farmer Mac enjoys a unique position, sharing in upside opportunity in strong markets and benefiting from downside protection and increased relative demand in weak markets***

## ***Strong Market – Farmer Mac can participate in the upside***

- Situation: Credit is healthy, transaction volumes are high, and capital is plentiful
- Impacts on Farmer Mac:
  - Farmer Mac can benefit from higher industry volumes and healthy credit
  - However, when farm income is high and capital is plentiful, the relative value of access to GSE capital may be marginally lower
  - Earnings can benefit from lower credit costs, but spreads may be tighter

## ***Weak Market – Farmer Mac can benefit from loss protection and increased demand due to tighter credit conditions***

- Situation: Declining farm income, land values, and credit quality; less access to capital
- Impacts on Farmer Mac:
  - Farmer Mac can benefit from loss protection given its unique diversified geographic/commodity portfolio and its conservative underwriting standards
  - Farmer Mac can also benefit from the greater relative value of GSE capital in tighter credit market conditions
  - However, in bear markets, no entity will be immune to declining credit quality, although spreads may be more favorable



# Farmer Mac's Downside Protection

## **Conservative underwriting with significant focus on repayment strength and low LTVs**

- Total Debt Coverage (TDC) ratio of at least 1.25x
- Generally maximum LTVs of 60% to 70%, but in practice average 40% to 45% on mortgages purchased
- Require minimum borrower net equity of 50% across all agricultural assets
- Significant scrutiny given to property access and access to water, among other items

## **Farmer Mac credits less likely to default as compared to the broader industry**

- Farmer Mac is generally recognized as having the tightest credit requirements for ag mortgage loans
- Primary focus on repayment capacity through stressed input assumptions during underwriting process
- Farmer Mac is not a “lender of last resort”
- Farm Credit Administration is a strong safety and soundness regulator

## **Farmer Mac credits less likely to incur losses even when a default occurs**

- Given Farmer Mac's portfolio average LTV of 44% as of September 30, 2018, average farm asset value losses would need to be in excess of 56% to begin to generate the first dollar of loss to Farmer Mac
  - Farmer Mac's “stress scenario losses” of farm asset values range from 17% to 48% for various regions
  - The 1980s agricultural credit crisis saw farm asset values decline approximately 23%<sup>(1)</sup> from peak to trough



<sup>(1)</sup> Source: USDA, National Agricultural Statistics Service (as of August 2015).

# Lines of Business and Products

AS OF SEPTEMBER 30, 2018

## Product Type

## Customers

## Lines of Business

\$ IN BILLIONS AND PERCENTAGE OF TOTAL VOLUME

		F & R	USDA	RU	IC	Total
<b>LOAN PURCHASES</b>	• Ag Banks	\$4.4	\$2.5	\$0.9	--	\$7.8
	• FCS Institutions					
	• Insurance Companies	23%	12%	5%		40%
	• Rural Utilities Cooperatives					
<b>WHOLESALE FINANCING</b>	• Ag Banks	--	--	--	\$8.4	\$8.4
	• Ag Investment Funds					
• AgVantage	• Insurance Companies				43%	43%
• Farm Equity AgVantage	• Production and Agribusiness Companies					
	• Rural Utilities Cooperatives					
<b>CREDIT PROTECTION</b>	• FCS Institutions	\$2.7	--	\$0.7	--	\$3.3
	• Ag Banks					
• Long-term Standby Purchase Commitments (LTSPCs)/ AMBS Guarantees	• Insurance Companies	14%		3%		17%
	• Ag Investment Funds					
	• Rural Utilities Cooperatives					
	<b>Total</b>	<b>\$7.1</b>	<b>\$2.5</b>	<b>\$1.6</b>	<b>\$8.4</b>	<b>\$19.5</b>

 = Allowances and provisions recorded on these assets

Note: Table may not sum to total due to rounding





# Credit-Risk Adjusted Returns

THIRD QUARTER 2018

## Lines of Business

\$ IN MILLIONS

	<u>Farm &amp; Ranch</u> <sup>(1)</sup>		<u>USDA</u>	<u>Rural Utilities</u>		<u>Institutional Credit</u>	<u>Total</u>
	<u>Loan Purchase</u>	<u>Credit Protection</u>		<u>Loan Purchase</u>	<u>Credit Protection</u>		
Assets	\$2,937	\$4,135	\$2,471	\$963	\$669	\$8,365	\$19,541
% of Total Outstanding Business	15%	21%	13%	5%	3%	43%	
YOY Growth (%)	7%	8%	7%	(10)%	(18)%	6%	5%
Net Effective Spread (%) <sup>(2)</sup>	1.91%	--	0.86%	1.18%	--	0.78%	0.93%
Net Effective Spread (\$) <sup>(2)</sup>	\$14	--	\$5	\$3	--	\$16	\$39
Guarantee & Commitment Fees (\$)	--	\$4.5	\$0.2	--	\$0.4	\$0.1	\$5.2
Credit Risk-Weighted Assets (%) <sup>(3)</sup>	~65%	~55%	~0%	~40%	~45%	~3%	~25%
Credit Risk-Weighted Assets (\$) <sup>(3)</sup>	\$1,909	\$2,274	\$0	\$385	\$301	\$251	\$5,023
Risk-Adjusted Equity Allocation (at 10%) <sup>(4)</sup>	\$191	\$227	\$0	\$39	\$30	\$25	\$502
<b>Credit Risk-Adjusted ROE (annualized)<sup>(5)</sup></b>	<b>~30%</b>	<b>~8%</b>	<b>Undefined</b>	<b>~30%</b>	<b>~5%</b>	<b>~250%</b>	<b>~35%</b>

(1) For the purposes of this chart, Farm & Ranch Loan Purchase assets include loans held on-balance sheet and Farm & Ranch Credit Protection assets include loans consolidated on-balance sheet held in trusts with beneficial interests owned by third party investors and loans underlying off-balance sheet LTSPCs and Farm & Ranch Guaranteed Securities.

(2) Net effective spread is a non-GAAP measure. For more information on the use of non-GAAP measures, please see page 3. For a reconciliation of net effective spread to GAAP net interest income, please refer to pages 40-41 of the Appendix.

(3) Approximate result is based on the application of the Advanced Internal Ratings-Based credit risk-weighting methodology presented by the Basel Committee on Banking Supervision for evaluating capital adequacy.

(4) Risk-Adjusted Equity Allocation of 10% approximates the capital requirements set forth under Farmer Mac's Board-approved policy on capital adequacy, which requires a Tier 1 capital ratio of not less than 7% and a Tier 1 capital conservation buffer of greater than 2.5% of Farmer Mac's total risk weighted assets.

(5) Credit risk-adjusted ROE calculated by dividing the sum of Net Effective Spread and Guarantee & Commitment Fees into the Risk-Adjusted Equity Allocation.

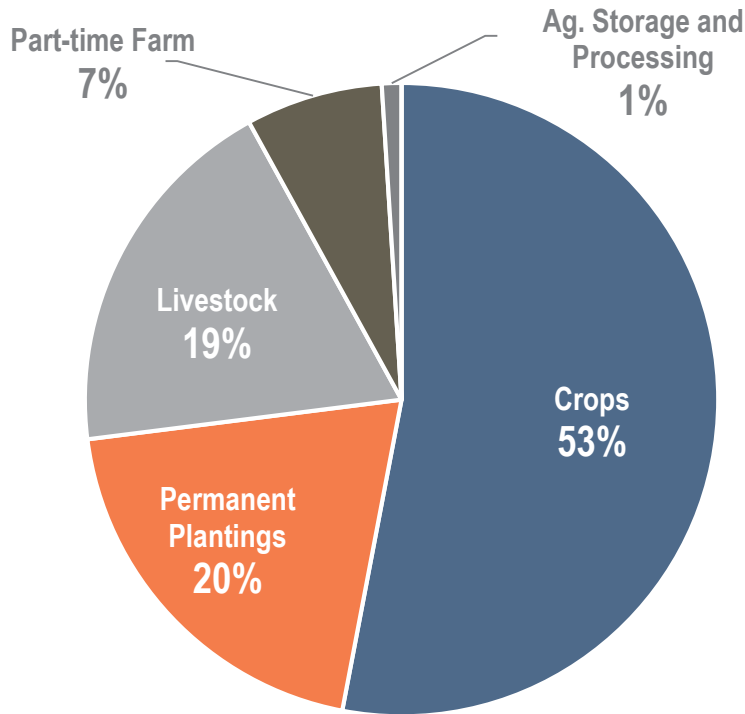
FARMER MAC OVERVIEW



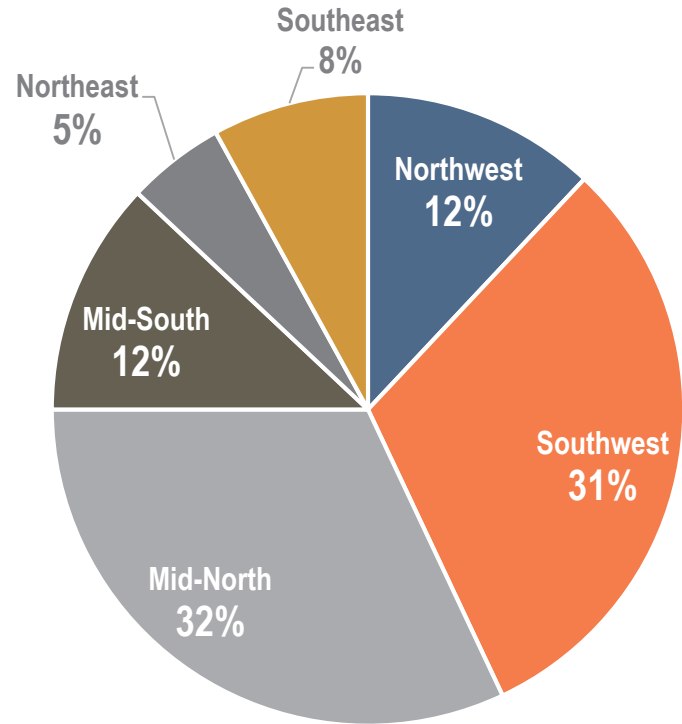
# Farm & Ranch Loan Portfolio Diversification<sup>(1)</sup>

AS OF SEPTEMBER 30, 2018

*By Commodity Type*



*By Geographic Region*



<sup>(1)</sup> Farm & Ranch portfolio includes on-balance sheet loans held and loans underlying LTSPCs.



# Core Earnings<sup>(1)</sup> – Direct Function of Three Factors

## Factors

## Things to Consider

### BUSINESS VOLUME

- Macro supply/demand for ag credit
- Farmer Mac business development success
- Impact of potential credit quality shocks
- Impact of potential rate shocks

### NET EFFECTIVE SPREAD<sup>(1)</sup>

- Macro supply/demand for ag credit
- Absolute level of interest rates
- Business mix
- Delinquencies

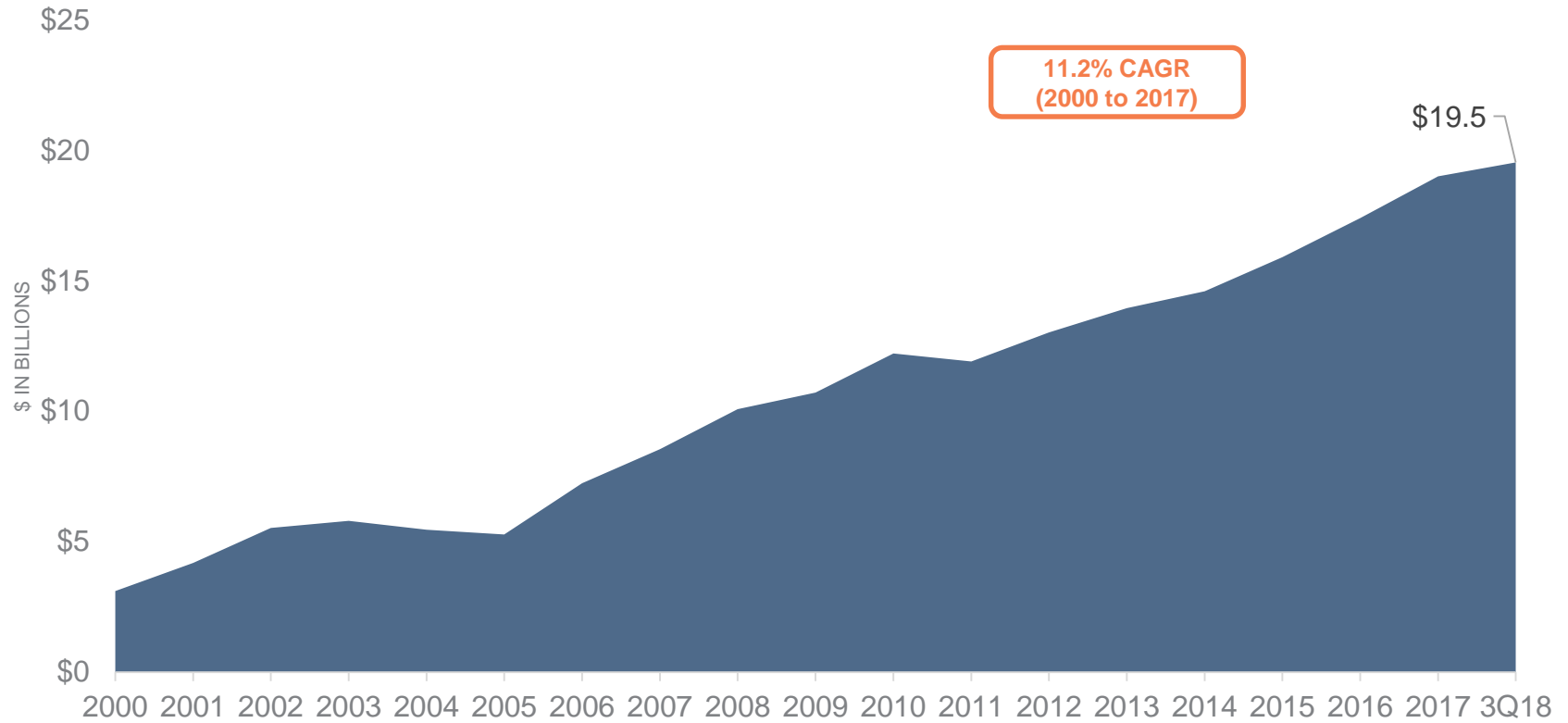
### CREDIT QUALITY

- Idiosyncratic borrower impacts: death in family, divorce, and disease
- Commodity price volatility
- Acts of nature: droughts, disease, etc.



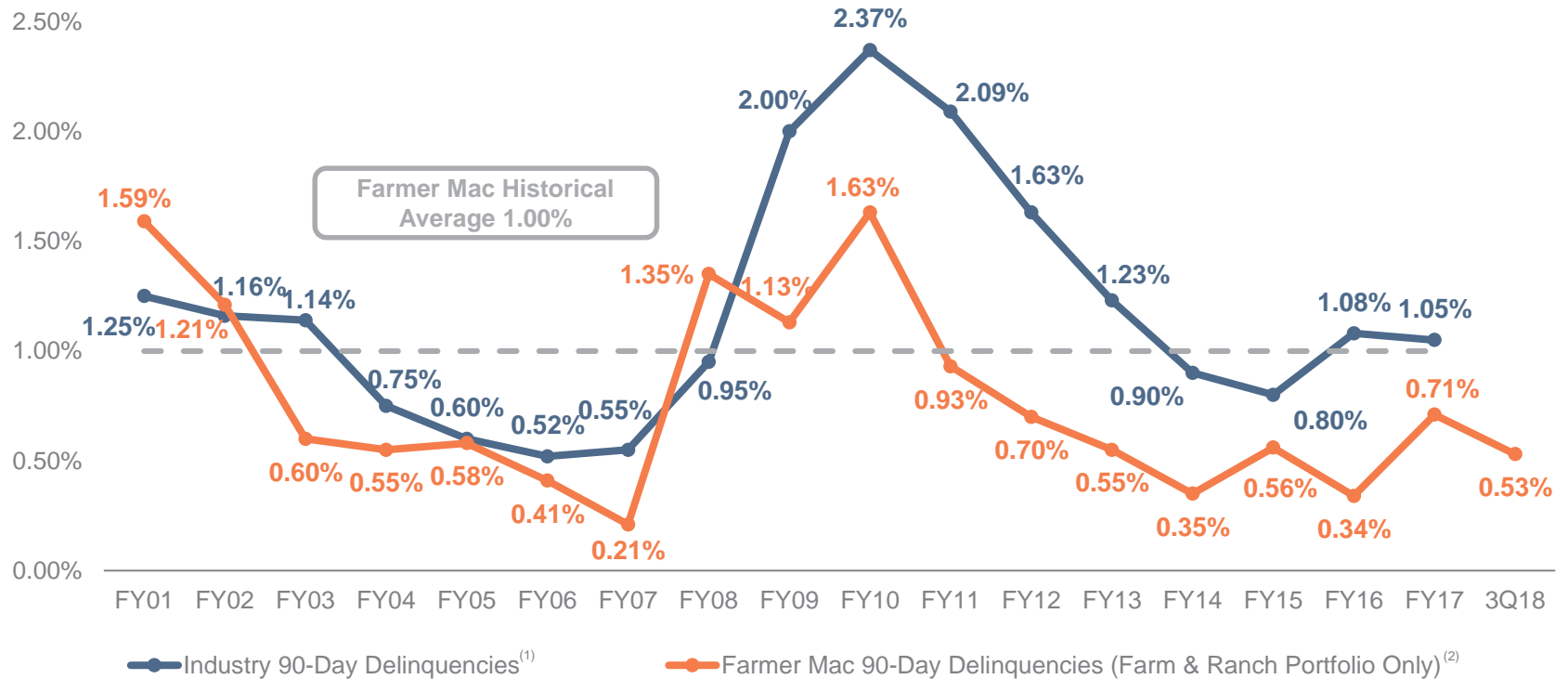
<sup>(1)</sup> Core earnings and net effective spread are non-GAAP measures. For more information on the use of these non-GAAP measures, please see page 3. For a reconciliation of core earnings to GAAP net income attributable to common stockholders and a reconciliation of net effective spread to GAAP net interest income, please refer to pages 37-40 of the Appendix.

# Farmer Mac Outstanding Business Volume



# Farmer Mac Credit vs. Industry

## 90-Day Delinquencies

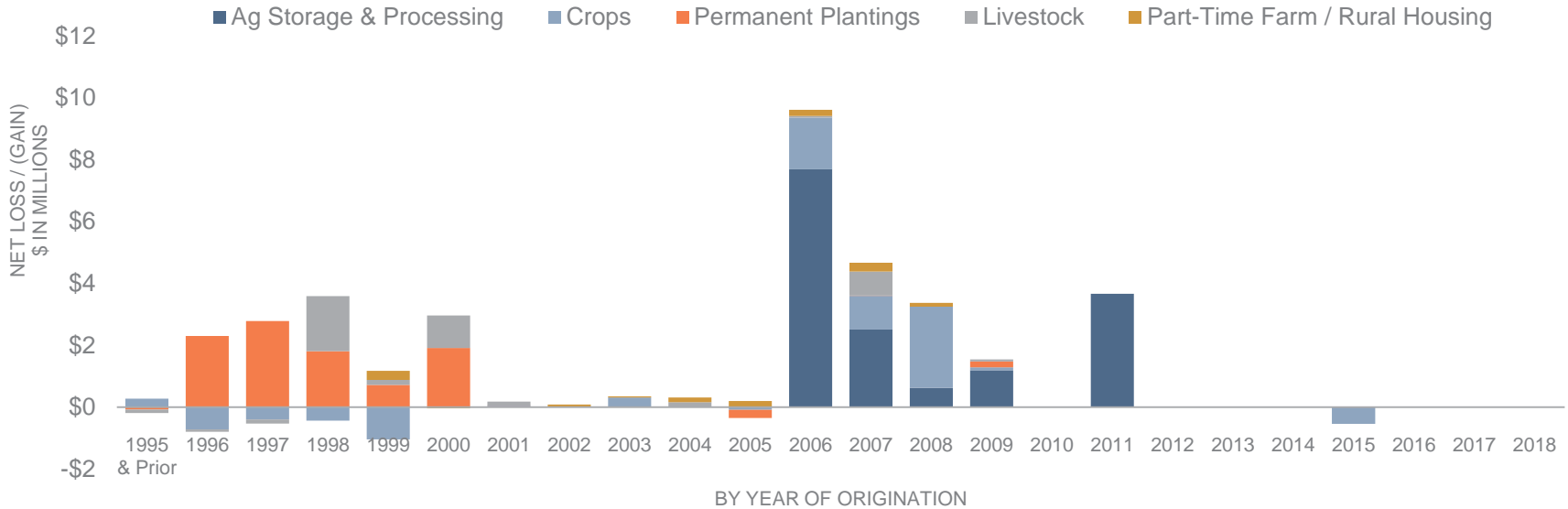


<sup>(1)</sup> Source: FDIC Call Report Data & Farm Credit Funding Corp Annual Information Statements – Non-accrual real estate loans and accruing loans that are 90 days or more past due made by commercial and Farm Credit System banks (as of March 2018).

<sup>(2)</sup> Delinquencies include loans held and loans underlying off-balance sheet Farm & Ranch Guaranteed Securities and LTSPCs that are 90 days or more past due, in foreclosure, or in bankruptcy with at least one missed payment, excluding loans performing under either their original loan terms or a court-approved bankruptcy plan.



# Farmer Mac – Historical Credit Losses



**Farm & Ranch line of business has historical cumulative losses of 0.13%, or less than 1bp per year**

- Cumulative losses of \$33 million on \$25 billion of cumulative historical business volume

**Farmer Mac’s Rural Utilities, USDA Guarantees, and Institutional Credit lines of business have not had any credit losses to date**





# *Appendix*

# Key Company Metrics

(\$ in thousands, except per share amounts)	3Q18 YTD	2017	2016	2015
Core Earnings <sup>(1)</sup>	<b>\$63,588</b>	\$65,631	\$53,481	\$47,035
Core Earnings per Diluted Share <sup>(1)</sup>	<b>\$5.92</b>	\$6.08	\$4.98	\$4.16
Net Effective Spread (\$) <sup>(1) (2)</sup>	<b>\$112,340</b>	\$141,303	\$123,072	\$117,428
Net Effective Spread (%) <sup>(1) (2)</sup>	<b>0.90%</b>	0.91%	0.84%	0.85%
Guarantee & Commitment Fees	<b>\$15,424</b>	\$20,350	\$19,170	\$17,155
Core Capital Above Statutory Minimum	<b>\$173,800</b>	\$136,800	\$143,200	\$102,400
Common Stock Dividends per Share	<b>\$1.74</b>	\$1.44	\$1.04	\$0.64
Outstanding Business Volume	<b>\$19,540,586</b>	\$19,007,311	\$17,399,475	\$15,898,820
90-Day Delinquencies – Farm & Ranch	<b>0.53%</b>	0.71%	0.34%	0.56%
Charge-Offs	<b>\$17</b>	\$327	\$130	\$3,772
Book Value per Share <sup>(3)</sup>	<b>\$47.69</b>	\$42.59	\$38.42	\$33.66
Core Earnings Return on Equity	<b>17%</b>	15%	13%	13%

<sup>(1)</sup> Core earnings, core earnings per share, and net effective spread are non-GAAP measures. For more information on the use of these non-GAAP measures, please see page 3. For a reconciliation of core earnings to GAAP net income attributable to common stockholders and core earnings per share to earnings per common share, and a reconciliation of net effective spread to GAAP net interest income, please refer to pages 37-40 of the Appendix.

<sup>(2)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.

<sup>(3)</sup> Book Value per Share excludes accumulated other comprehensive income.





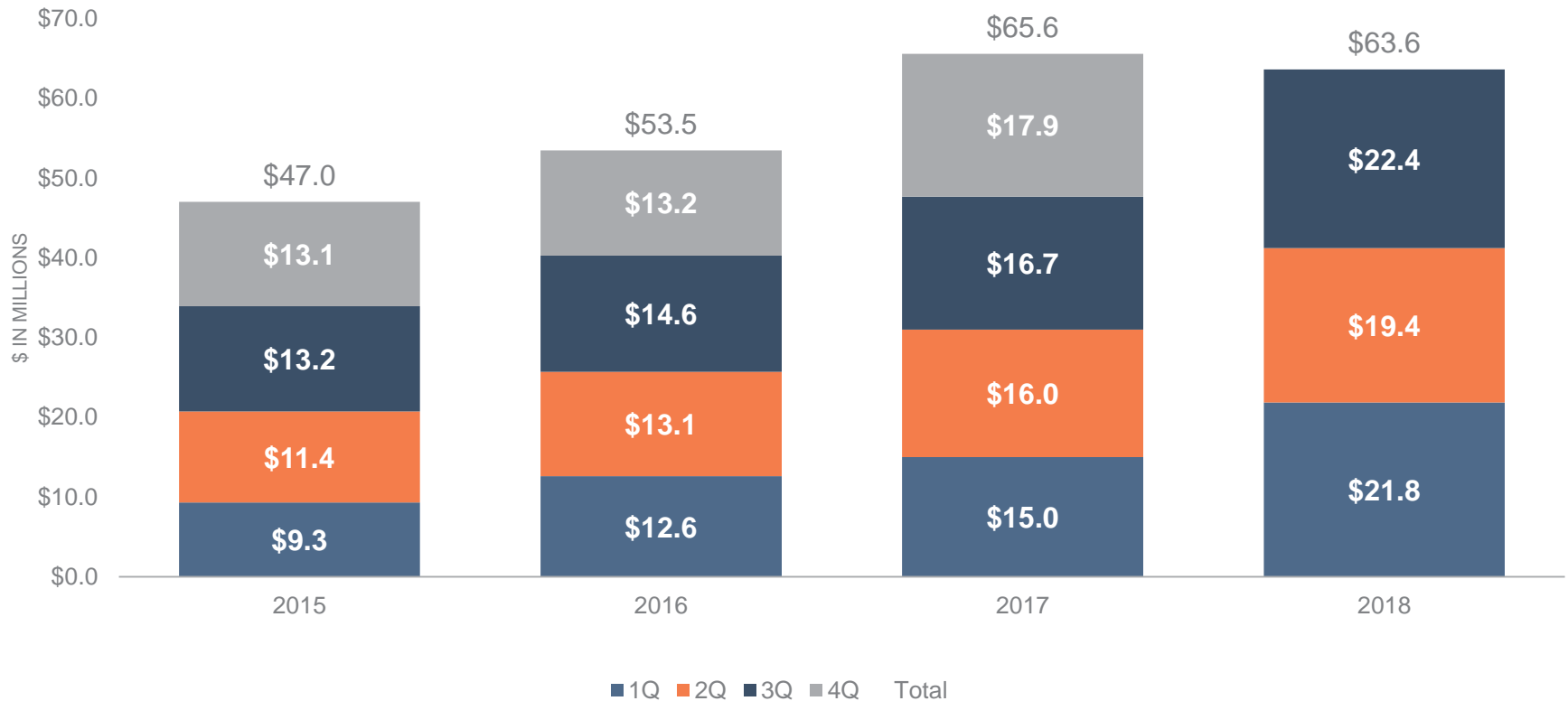
# Business Development


<i>Product Type</i>	<i>Marketing Channel</i>	<i>Target Customers</i>
<b>AG LOAN PURCHASES AND CREDIT PROTECTION</b>	<ul style="list-style-type: none"> <li>• Regional relationship managers</li> <li>• Geographically dispersed nationwide</li> <li>• Cover ag banks and non-bank originators</li> <li>• Industry thought leadership – media interviews, speaking engagements, publications (<i>The Feed</i>)</li> <li>• Emerging digital marketing efforts</li> </ul>	<ul style="list-style-type: none"> <li>• Over 3,100 commercial banks with agricultural loans on-balance sheet (nearly 700 are approved Farmer Mac lenders)<sup>(1)</sup></li> <li>• Farm Credit System (FCS)</li> <li>• Insurance company ag lenders</li> <li>• Other non-bank lenders</li> </ul>
<b>WHOLESALE FINANCING FOR RURAL LENDERS</b>	<ul style="list-style-type: none"> <li>• Institutional Business Development function</li> <li>• C-suite outreach to target firms</li> <li>• Sponsor/attend industry conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Insurance company ag lenders</li> <li>• Larger banks with ag mortgage portfolios</li> <li>• Rural utilities cooperative lenders</li> </ul>
<b>WHOLESALE FINANCING FOR INVESTORS IN AG ASSETS</b>	<ul style="list-style-type: none"> <li>• Same as “Wholesale Financing for Rural Lenders” above</li> <li>• Leverage capital markets relationships to identify ag funds and ag companies seeking low-cost wholesale financing</li> </ul>	<ul style="list-style-type: none"> <li>• Public or private ag investment funds (all structures)</li> <li>• Agricultural companies – production ag and agribusiness (for profit and cooperative)</li> </ul>
<b>RURAL UTILITIES LOAN PURCHASES AND CREDIT PROTECTION</b>	<ul style="list-style-type: none"> <li>• C-suite relationships</li> <li>• Credit department contacts</li> <li>• Capital markets relationship contacts</li> </ul>	<ul style="list-style-type: none"> <li>• National Rural Utilities Cooperative Finance Corporation (non-GSE)</li> <li>• CoBank (FCS GSE)</li> </ul>



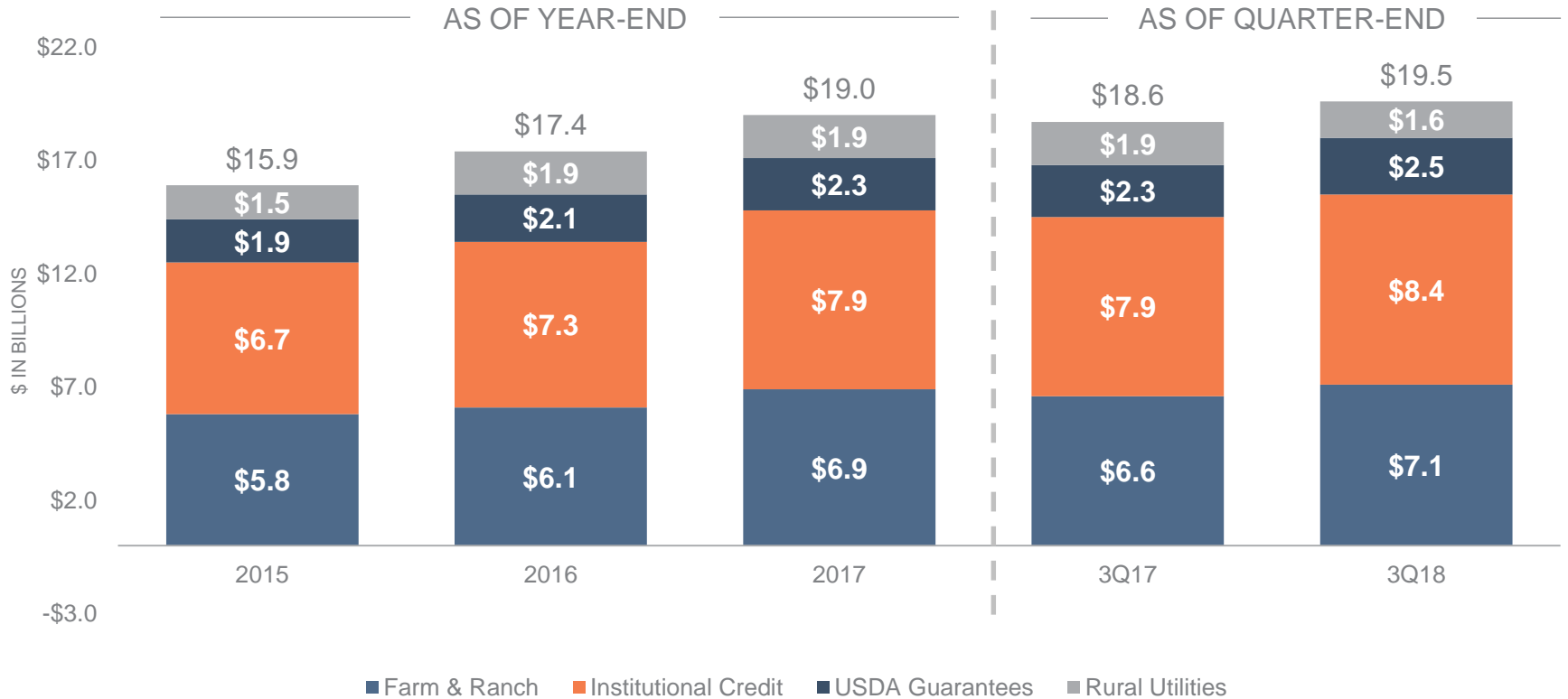
<sup>(1)</sup> Source: FDIC Statistics on Depository Institutions datasets (<https://www2.fdic.gov/sdi/index.asp>) (as of March 2018).

# Core Earnings (Non-GAAP Measure)<sup>(1) (2)</sup>



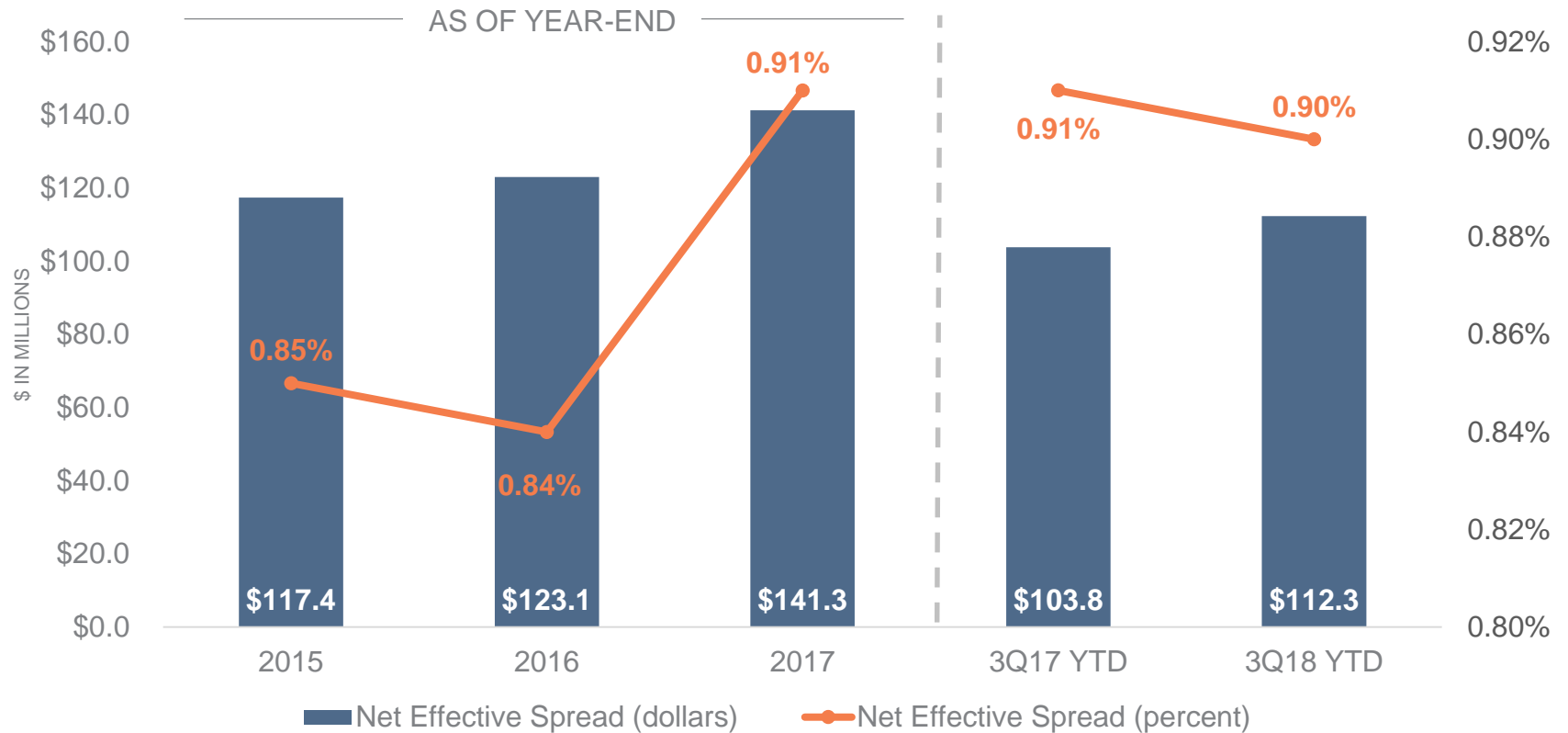
 <sup>(1)</sup> Core earnings is a non-GAAP measure. For a reconciliation of core earnings to GAAP net income attributable to common stockholders, please refer to pages 37-38 of the Appendix.  
<sup>(2)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.

# Business Volume<sup>(1) (2)</sup>



(1) Includes on- and off-balance sheet outstanding business volume.  
 (2) Periods may not sum to total due to rounding.

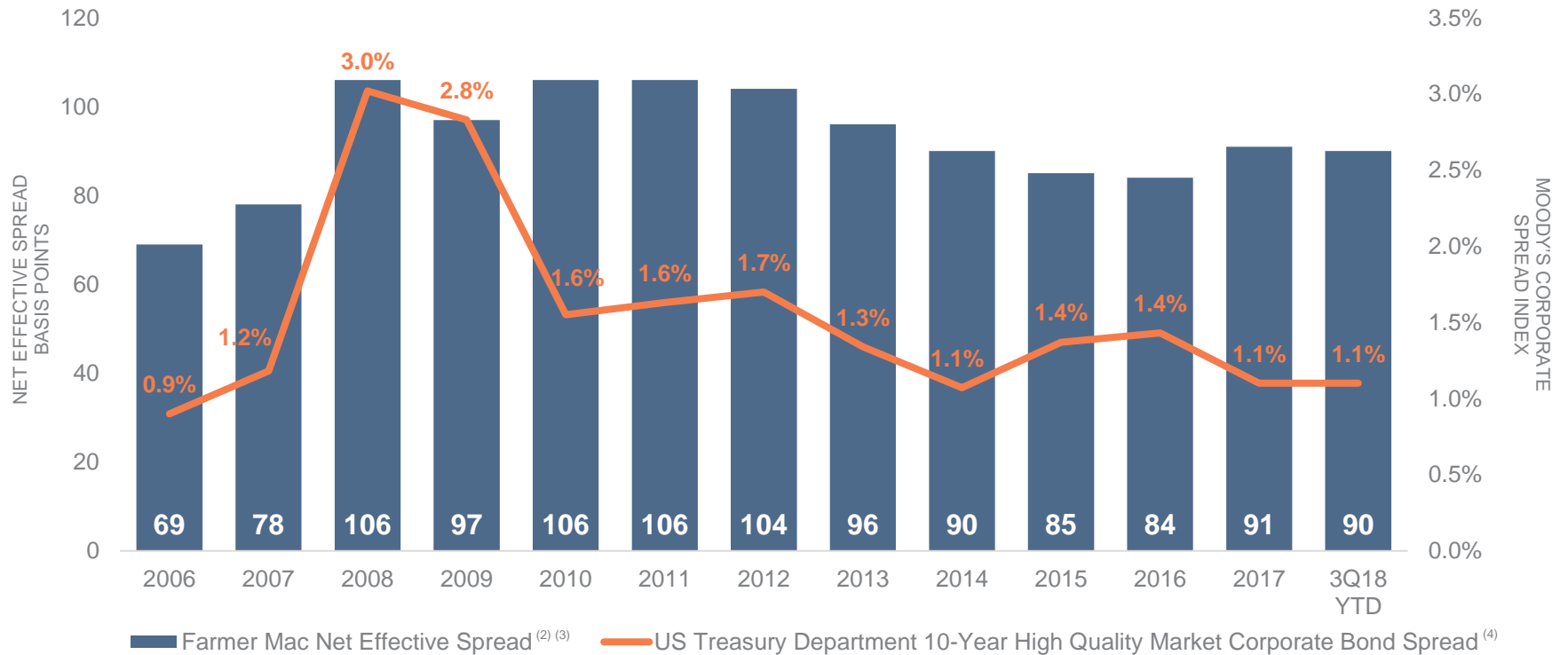
# Net Effective Spread (Non-GAAP Measure)<sup>(1) (2)</sup>



<sup>(1)</sup> Net effective spread is a non-GAAP number. For more information on the use of this non-GAAP measure, please see page 3. For a reconciliation of net effective spread to GAAP net interest income, please refer to page 40 of the Appendix.

<sup>(2)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.

# Farmer Mac Net Effective Spread <sup>(1)</sup>



(1) Net effective spread is a non-GAAP measure. For more information on the use of this non-GAAP measure, please see page 3. For a reconciliation of net effective spread to GAAP net interest income, please refer to page 40 of the Appendix.

(2) Beginning Jan. 1, 2015, Farmer Mac classified all of the income from Farmer Mac Guaranteed Securities that it holds in its portfolio as interest income. Periods prior to 2011 have not been restated.

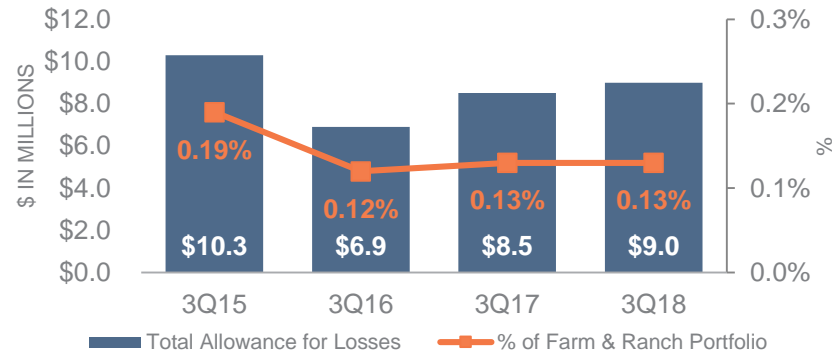
(3) Periods beginning with 2015 and onwards have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3. Prior periods have not been recast to reflect the revised methodology.

(4) Source: St. Louis Fed, Economic Database: Average 10-Year High Quality Market (HQM) Corporate Bond Par Yield – Average 10-Year Treasury CMT.

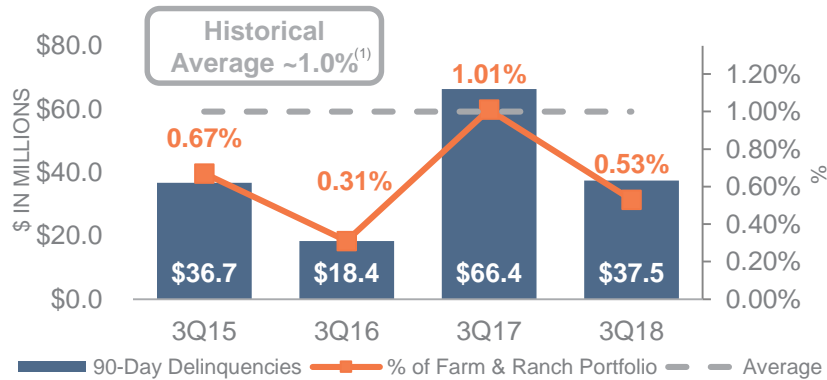


# Credit Metrics

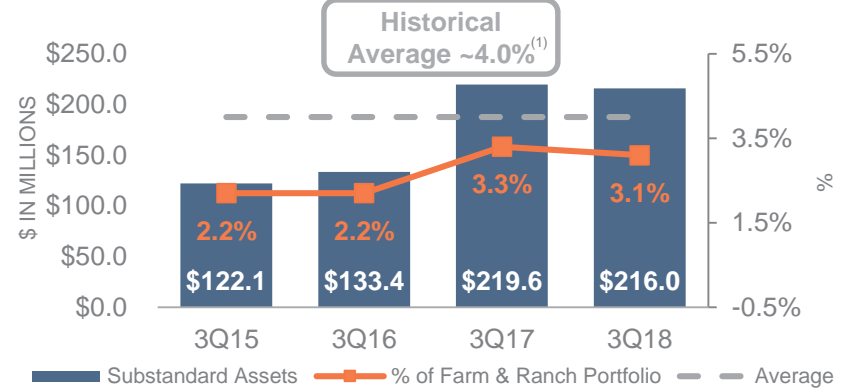
## Total Allowance for Losses



## 90-Day Delinquencies



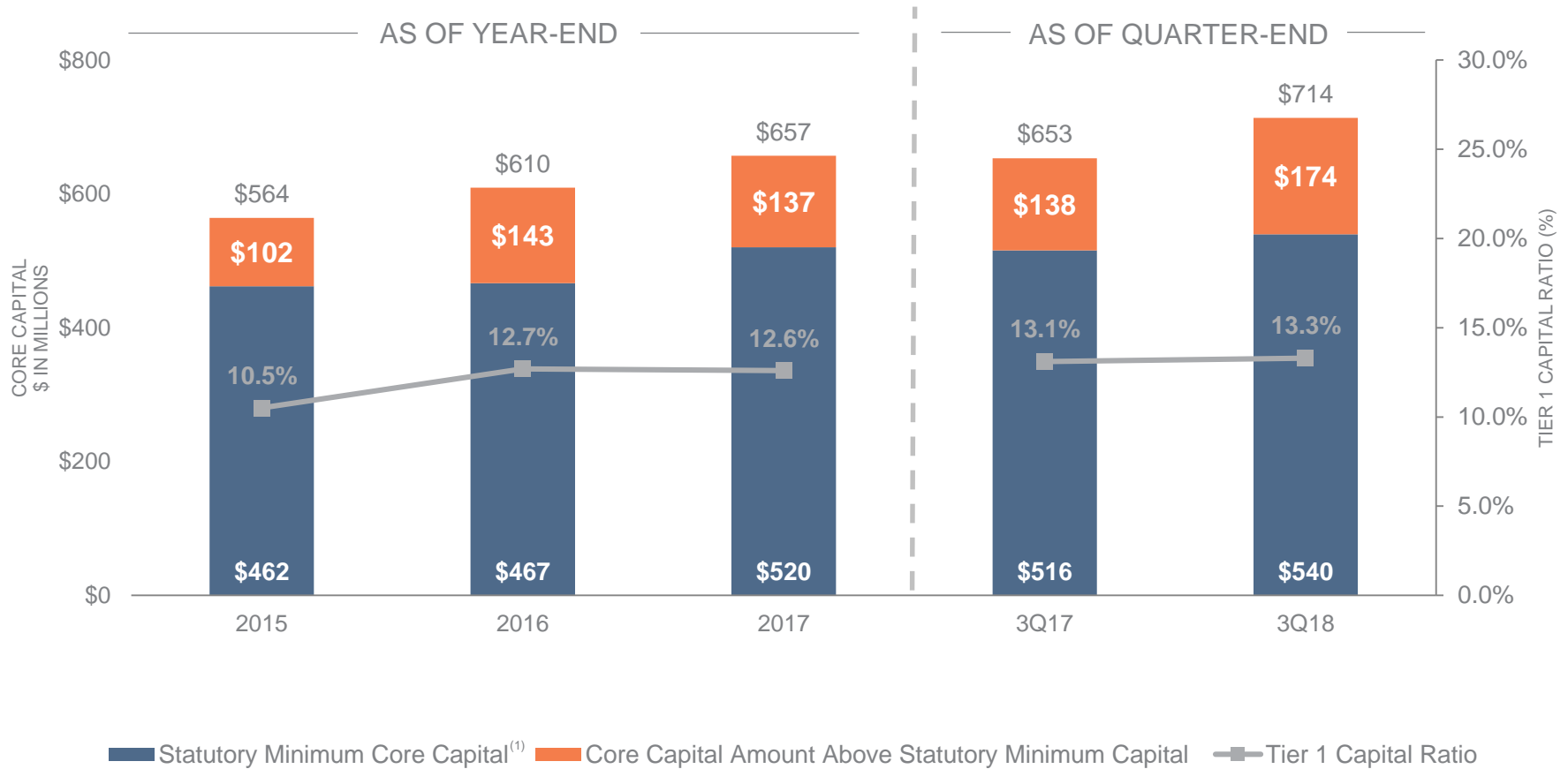
## Substandard Assets



<sup>(1)</sup> Farmer Mac's historical averages are based on approximately 15 years of historical data for the Farm & Ranch line of business.



# Capital



<sup>(1)</sup> Statutory Minimum Core Capital defined as total stockholders' equity less accumulated other comprehensive income.



# Liquidity – Investment Portfolio

AS OF SEPTEMBER 30, 2018

**Farmer Mac maintains an investment portfolio to provide back-up source of liquidity in excess of regulatory requirements**

- Minimum of 90 days of liquidity required by regulation

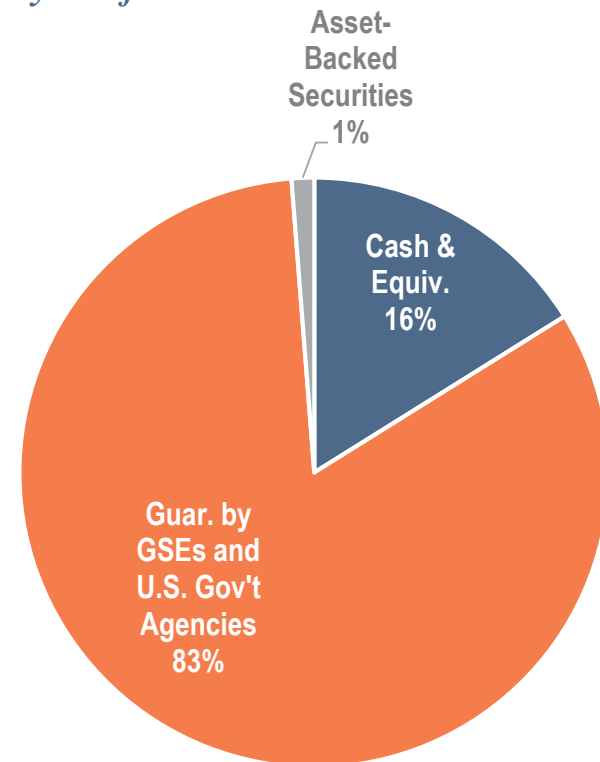
**\$2.7 billion investment portfolio at September 30**

- Cash and highly-rated investment securities
- Conservative portfolio goals
  - Minimize exposure to market volatility
  - Preservation of capital
  - Ready access to cash
- Provided 212 days of liquidity as of September 30, 2018

**Farmer Mac also has \$1.5 billion line of credit with U.S. Treasury**

- Supports Farmer Mac’s guarantee obligations
- Farmer Mac has never used this line of credit

Liquidity Portfolio





# *Interest Rate Risk*

## ***Match fund asset purchases with liabilities that have similar interest rate characteristics***

- Duration and convexity matching
- Coupon type
- Reset frequency

## ***Manage pre-payment risk on mortgages***

- Issue a portfolio of callable and bullet debt across spectrum of maturities to obtain the appropriate match
- Can adjust effective asset and debt coupon and duration characteristics through the use of interest rate swaps or other derivatives

## ***Perform regular stress testing and disclose a variety of sensitivity measures***

- Duration Gap
- Market Value of Equity (MVE) Sensitivity
- Net Effective Spread (NES) Sensitivity
- Measure these sensitivities' impact on various capital metrics



# Funding

## Finance asset purchases with proceeds of debt issuances

- 20+ dealers
- Match-funding provides for stable net effective spread and immaterial interest rate risk

## Farmer Mac's debt securities carry privileges for certain holders

- 20% capital risk weighting
- Eligible collateral for Fed advances
- Legal investments for federally supervised financial institutions (banks, etc.)

## Debt Securities Trade at Narrow Spreads to Comparable Maturity Treasuries

MATURITY (YEARS)	1	3	5	10
SPREAD TO TREASURY (AS OF SEPTEMBER 30, 2018)	9 bps	16 bps	17 bps	54 bps



# Equity Capital Structure

	<i>NYSE Ticker</i>	<i>Dividend Yield</i>	<i>Shares Outstanding</i>
<b>COMMON STOCK</b>	<b>CLASS A VOTING COMMON STOCK</b> • Ownership restricted to non-Farm Credit System financial institutions	AGM.A	3.50% <sup>(1)</sup> 1.0 million
	<b>CLASS B VOTING COMMON STOCK</b> • Ownership restricted to Farm Credit System institutions	--	-- 0.5 million
	<b>CLASS C NON-VOTING COMMON STOCK</b> • No ownership restrictions	AGM	3.21% <sup>(1)</sup> 9.1 million
<b>PREFERRED STOCK</b>	<b>SERIES A NON-CUMULATIVE PREFERRED STOCK</b> • Option to redeem at any time on or after January 17, 2018 • Redemption Value: \$25 per share	AGM.PR.A	5.875% <sup>(2)</sup> 2.4 million
	<b>SERIES B NON-CUMULATIVE PREFERRED STOCK</b> • Option to redeem at any time on or after April 17, 2019 • Redemption Value: \$25 per share	AGM.PR.B	6.875% <sup>(2)</sup> 3.0 million
	<b>SERIES C FIXED-TO-FLOATING RATE NON-CUMULATIVE PREFERRED STOCK</b> • Option to redeem at any time on or after July 18, 2024 • Redemption Value: \$25 per share	AGM.PR.C	6.000% <sup>(2)</sup> 3.0 million



<sup>(1)</sup> Common stock dividend annualized divided by quarter-end closing price

<sup>(2)</sup> Par value of annual dividend

# Farmer Mac's Net Effective Spread History<sup>(1) (2)</sup>

(\$ in thousands)	Net Effective Spread by Business Segment											
	Farm & Ranch		USDA Guarantees		Rural Utilities		Institutional Credit		Corporate		Net Effective Spread	
	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield	Dollars	Yield
For the quarter ended:												
<b>September 30, 2018</b>	<b>\$ 13,887</b>	<b>1.91%</b>	<b>\$ 4,627</b>	<b>0.86%</b>	<b>\$ 2,877</b>	<b>1.18%</b>	<b>\$ 15,642</b>	<b>0.78%</b>	<b>\$ 2,044</b>	<b>0.30%</b>	<b>\$ 39,077</b>	<b>0.93%</b>
June 30, 2018	13,347	1.86%	4,398	0.83%	2,923	1.15%	15,220	0.76%	274	0.04%	36,162	0.86%
March 31, 2018	12,540	1.80%	4,400	0.82%	2,950	1.12%	14,824	0.78%	2,387	0.36%	37,101	0.91%
December 31, 2017	12,396	1.80%	4,979	0.93%	3,057	1.14%	14,800	0.78%	2,235	0.35%	37,467	0.93%
September 30, 2017	11,303	1.73%	4,728	0.90%	2,765	1.07%	14,455	0.78%	2,725	0.41%	35,976	0.91%
June 30, 2017	11,158	1.77%	4,551	0.87%	2,669	1.06%	14,467	0.81%	2,489	0.36%	35,334	0.91%
March 31, 2017	10,511	1.77%	4,561	0.89%	2,568	1.04%	12,615	0.82%	2,271	0.32%	32,526	0.90%
December 31, 2016	10,131	1.75%	5,152	1.04%	2,530	1.02%	11,636	0.78%	1,999	0.26%	31,448	0.88%
September 30, 2016	10,476	1.86%	4,994	1.03%	2,541	1.01%	11,431	0.75%	2,239	0.24%	31,681	0.85%

<sup>(1)</sup> Net effective spread is a non-GAAP measure. For a reconciliation of net effective spread to GAAP net interest income to net effective spread, please refer to page 40 of the Appendix.

<sup>(2)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.



# Reconciliation of Core Earnings to Net Income

(\$ in thousands)	Core Earnings by Quarter Ended								
	Sep-18	Jun-18	Mar-18	Dec-17	Sep-17	Jun-17	Mar-17	Dec-16	Sep-16
Net income attributable to common stockholders	\$ 26,474	\$ 26,340	\$ 22,524	\$ 16,710	\$ 18,487	\$ 17,488	\$ 18,615	\$ 25,465	\$ 16,364
Reconciling items:									
Gains/(losses) on undesignated financial derivatives due to fair value changes	3,625	6,709	(2,279)	(261)	995	801	8,683	17,906	734
Gains/(losses) on hedging activities due to fair value changes	1,051	1,687	2,564	(3)	1,742	1,420	(3,878)	(673)	726
Unrealized (losses)/gains on trading assets	(3)	11	16	60	-	(2)	(82)	(474)	1,182
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(38)	196	(686)	(129)	(954)	(117)	(127)	(40)	(157)
Net effects of terminations or net settlements on agency forward contracts and hedging activities <sup>(1)</sup>	546	232	1,242	632	862	232	948	2,150	238
Re-measurement of net deferred tax assets due to enactment of new tax legislation	-	-	-	(1,365)	-	-	-	-	-
Income tax effect related to reconciling items	(1,088)	(1,855)	(180)	(105)	(926)	(816)	(1,941)	(6,604)	(953)
Sub-total	4,093	6,980	677	(1,171)	1,719	1,518	3,603	12,265	1,770
Core earnings	\$ 22,381	\$ 19,360	\$ 21,847	\$ 17,881	\$ 16,768	\$ 15,970	\$ 15,012	\$ 13,200	\$ 14,594

<sup>(1)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.



# Reconciliation of Core Earnings to Net Income

<i>(in thousands)</i>	Core Earnings by Period Ended			
	3Q18 YTD	2017	2016	2015
Net income attributable to common stockholders	\$ 75,338	\$ 71,300	\$ 64,152	\$ 47,371
Less reconciling items:				
Gains on undesignated financial derivatives due to fair value changes	8,055	10,218	8,585	1,859
Gains on hedging activities due to fair value changes	5,302	(719)	5,043	9,065
Unrealized gains/(losses) on trading assets	24	(24)	1,460	1,220
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(528)	(1,327)	(849)	(1,319)
Net effects of terminations or net settlements on financial derivatives and hedging activities <sup>(1)</sup>	2,020	2,674	2,178	(699)
Loss on retirement of Farmer Mac II LLC Preferred Stock <sup>(2)</sup>	-	-	-	(8,147)
Re-measurement of net deferred tax asset due to enactment of new tax legislation	-	(1,365)	-	-
Income tax effect related to reconciling items	(3,123)	(3,788)	(5,746)	(1,643)
Sub-total	11,750	5,669	10,671	336
Core earnings	\$ 63,588	\$ 65,631	\$ 53,481	\$ 47,035

<sup>(1)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.

<sup>(2)</sup> Relates to the write-off of deferred issuance costs as a result of the retirement of Farmer Mac II LLC Preferred Stock.



# Reconciliation of Core Earnings per Share to Earnings per Common Share

	Core Earnings per Diluted Share by Period Ended			
	3Q18 YTD	2017	2016	2015
GAAP - Diluted EPS	\$ 7.01	\$ 6.60	\$ 5.97	\$ 4.19
Less reconciling items:				
Gains on undesignated financial derivatives due to fair value changes	0.75	0.94	0.80	0.17
Gains/(losses) on hedging activities due to fair value changes	0.49	(0.07)	0.46	0.80
Unrealized gains on trading assets	-	-	0.14	0.11
Amortization of premiums/discounts and deferred gains on assets consolidated at fair value	(0.05)	(0.12)	(0.08)	(0.12)
Net effects of terminations or net settlements on financial derivatives and hedging activities	0.19	0.25	0.20	(0.06)
Re-measurement of net deferred tax asset due to enactment of new tax legislation <sup>(1)</sup>	-	(0.13)	-	-
Loss on retirement of Farmer Mac II LLC Preferred Stock <sup>(2)</sup>	-	-	-	(0.72)
Income tax effect related to reconciling items	(0.29)	(0.35)	(0.53)	(0.15)
Sub-total	1.09	0.52	0.99	0.03
Core Earnings - Diluted EPS	\$ 5.92	\$ 6.08	\$ 4.98	\$ 4.16

<sup>(1)</sup> Periods prior to fourth quarter 2017 have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3.

<sup>(2)</sup> Relates to the write-off of deferred issuance costs as a result of the retirement of Farmer Mac II LLC Preferred Stock.



# Reconciliation of Net Effective Spread to Net Interest Income

<i>(in thousands)</i>	Net Effective Spread by Period Ended												
	3Q18 YTD	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Net interest yield	<b>0.98%</b>	0.94%	0.90%	0.88%	0.51%	0.89%	1.14%	1.30%	1.30%	1.68%	1.62%	0.85%	0.85%
Net effect of consolidated trusts	<b>0.04%</b>	0.04%	0.03%	0.01%	0.01%	0.00%	0.02%	0.06%	0.15%	0.00%	0.00%	0.00%	0.00%
Net effect of securities purchased under agreement to resell and securities sold, not yet purchased	<b>0.00%</b>	0.00%	0.00%	0.00%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expense related to undesignated financial derivatives	<b>-0.08%</b>	-0.07%	-0.07%	-0.04%	-0.08%	-0.10%	-0.23%	-0.41%	-0.54%	-0.70%	-0.49%	0.00%	-0.07%
Amortization of premiums/discounts on assets consolidated at fair value	<b>0.01%</b>	0.01%	0.00%	0.02%	0.13%	0.17%	0.12%	0.12%	0.19%	0.00%	0.00%	0.00%	0.00%
Amortization of losses due to terminations or net settlements on financial derivatives and hedging activities <sup>(1)</sup>	<b>0.00%</b>	-0.01%	-0.02%	-0.02%	-0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fair value changes on fair value hedge relationships	<b>-0.05%</b>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Yield maintenance payments <sup>(2)</sup>	<b>0.00%</b>	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.01%	-0.04%	-0.01%	-0.07%	-0.07%	-0.09%
Net Effective Spread	<b>0.90%</b>	0.91%	0.84%	0.85%	0.90%	0.96%	1.04%	1.06%	1.06%	0.97%	1.06%	0.78%	0.69%

<sup>(1)</sup> Periods beginning with 2015 and onwards have been recast to reflect the revised methodology for calculating net effective spread that became effective in fourth quarter 2017, as further described on page 3. Prior periods have not been recast to reflect the revised methodology.

<sup>(2)</sup> Beginning in 2013, Farmer Mac no longer excluded yield maintenance payments.





# Core Earnings by Business Segment

For Three Months Ended September 30, 2018 (\$ in thousands)	Core Earnings by Business Segment						
	Farm & Ranch	USDA Guarantees	Rural Utilities	Institutional Credit	Corporate	Reconciling Adjustments	Consolidated Net Income
Net interest income	\$ 16,425	\$ 5,304	\$ 3,081	\$ 17,600	\$ 2,648	\$ -	\$ 45,058
Less: reconciling items <sup>(1) (2) (3)</sup>	(2,538)	(677)	(204)	(1,958)	(604)	5,981	-
Net effective spread	13,887	4,627	2,877	15,642	2,044	5,981	45,058
Guarantee and commitment fees <sup>(2)</sup>	4,489	214	376	91	-	(1,680)	3,490
Other income/(expense) <sup>(3)</sup>	294	5	15	-	(245)	880	949
Non-interest income/(loss)	4,783	219	391	91	(245)	(800)	4,439
Provision for loan losses	(99)	-	-	-	-	-	(99)
Release of reserve for losses	102	-	-	-	-	-	102
Other non-interest expense	(4,456)	(1,288)	(732)	(1,844)	(3,432)	-	(11,752)
Non-interest expense <sup>(4)</sup>	(4,354)	(1,288)	(732)	(1,844)	(3,432)	-	(11,650)
Core earnings before income taxes	14,217	3,558	2,536	13,889	(1,633)	5,181 <sup>(5)</sup>	37,748
Income tax (expense)/benefit	(2,986)	(747)	(533)	(2,917)	292	(1,088)	(7,979)
Core earnings before preferred stock dividends and attribution of income to non-controlling interest	11,231	2,811	2,003	10,972	(1,341)	4,093 <sup>(5)</sup>	29,769
Preferred stock dividends	-	-	-	-	(3,295)	-	(3,295)
Segment core earnings/(losses)	\$ 11,231	\$ 2,811	\$ 2,003	\$ 10,972	\$ (4,636)	\$ 4,093 <sup>(5)</sup>	\$ 26,474
Total assets at carrying value	\$ 4,438,128	\$ 2,212,515	\$ 956,204	\$ 8,103,181	\$ 2,764,006	\$ -	\$ 18,474,034
Total on- and off-balance sheet program assets at principal balance	\$ 7,072,018	\$ 2,471,251	\$ 1,632,037	\$ 8,365,280	\$ -	\$ -	\$ 19,540,586

<sup>(1)</sup> Excludes the amortization of premiums and discounts on assets consolidated at fair value, originally included in net interest income, to reflect core earnings amounts.

<sup>(2)</sup> Includes the reclassification of interest income and interest expense from consolidated trusts owned by third parties to guarantee and commitment fees, to reflect management's view that the net interest income Farmer Mac earns is effectively a guarantee fee.

<sup>(3)</sup> Includes the reclassification of interest expense related to interest rate swaps not designated as hedges, which are included in "Gains/(losses) on financial derivatives and hedging activities" on the consolidated financials statements, to determine the effective funding cost for each operating segment.

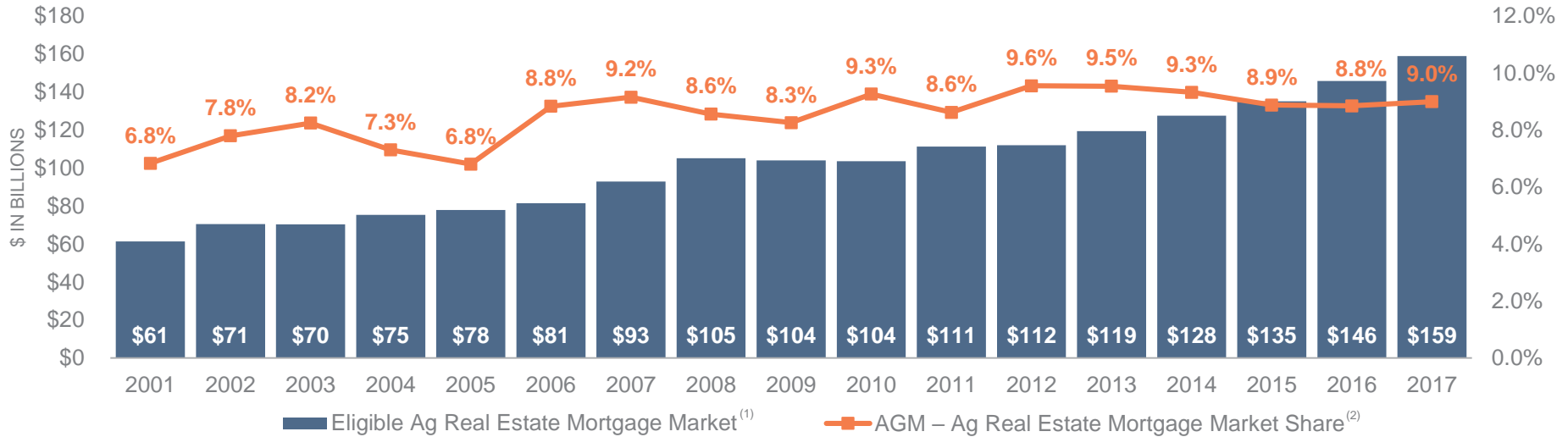
<sup>(4)</sup> Includes directly attributable costs and an allocation of indirectly attributable costs based on employee headcount.

<sup>(5)</sup> Net adjustments to reconcile to the corresponding income measures: core earnings before income taxes reconciled to income before income taxes; core earnings before preferred stock dividends and attribution of income to non-controlling interest reconciled to net income; and segment core earnings reconciled to net income attributable to common stockholders.



# Ag Real Estate Mortgage Market and Farmer Mac

## Agricultural Real Estate Mortgage Market



## Farmer Mac Business Volume

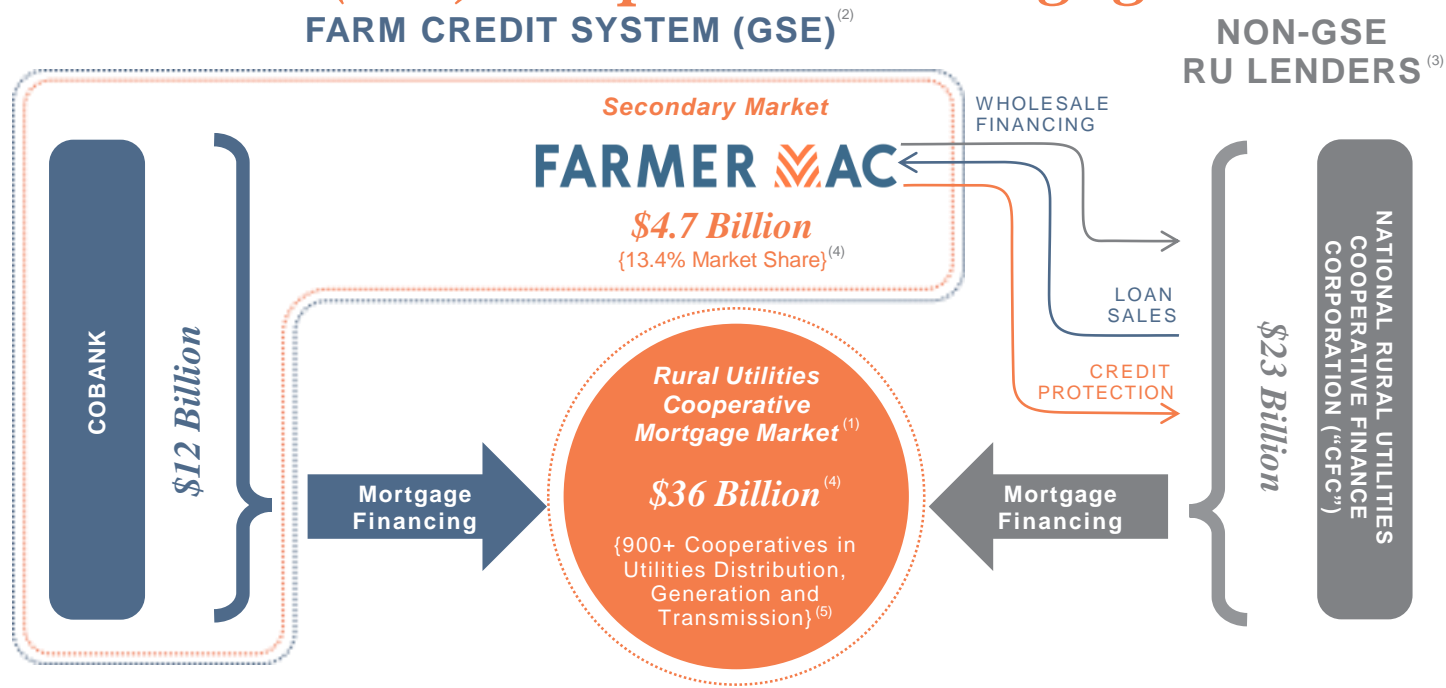
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	3Q18
Agricultural Outstanding Business Volume <sup>(2)</sup>	\$4.2	\$5.5	\$5.8	\$5.5	\$5.3	\$7.2	\$8.5	\$9.0	\$8.6	\$9.6	\$9.6	\$10.7	\$11.4	\$11.9	\$12.0	\$12.9	\$14.3	\$14.8
Total Outstanding Volume	\$4.2	\$5.5	\$5.8	\$5.5	\$5.3	\$7.2	\$8.5	\$10.1	\$10.7	\$12.2	\$11.9	\$13.0	\$14.0	\$14.6	\$15.9	\$17.4	\$19.0	\$19.5

<sup>(1)</sup> Source: Farmer Mac calculations using USDA, Economic Research Service, Federal Reserve Board of Governors, FDIC Call Report and FCS Call Report data; nominal dollars forecast for year-end 2017 on a prorated basis (latest available data as of April 2018). For more information on these calculations, see page 7.



<sup>(2)</sup> Includes total outstanding balance of loan purchases, guarantees, and LTSPCs in the Farm & Ranch line of business, USDA Guarantees, and AgVantage securities secured by collateral eligible for the Farm & Ranch line of business; excludes all loan purchases, guarantees, and LTSPCs in the Rural Utilities line of business and AgVantage securities secured by collateral eligible for the Rural Utilities line of business.

# Rural Utilities (RU) Cooperative Mortgage Market<sup>(1)</sup>



## Market Opportunity

### Industry dynamics may lead to Farmer Mac growth opportunities

- Ongoing high level of competition between rural utilities cooperative lenders
- As a result, CFC from time to time partners with Farmer Mac to provide competitive pricing for rural borrowers
- Opportunity for Farmer Mac to provide a competitive source of debt funding through Institutional Credit line of business

<sup>(1)</sup> RU cooperative mortgage market structure includes only the outstanding unpaid principal balance of first lien RU cooperative real estate mortgage assets.

<sup>(2)</sup> Source: CoBank 2017Q4 Financial Information, Electric Distribution and Generation & Transmission nominal dollars as of December 31, 2017.

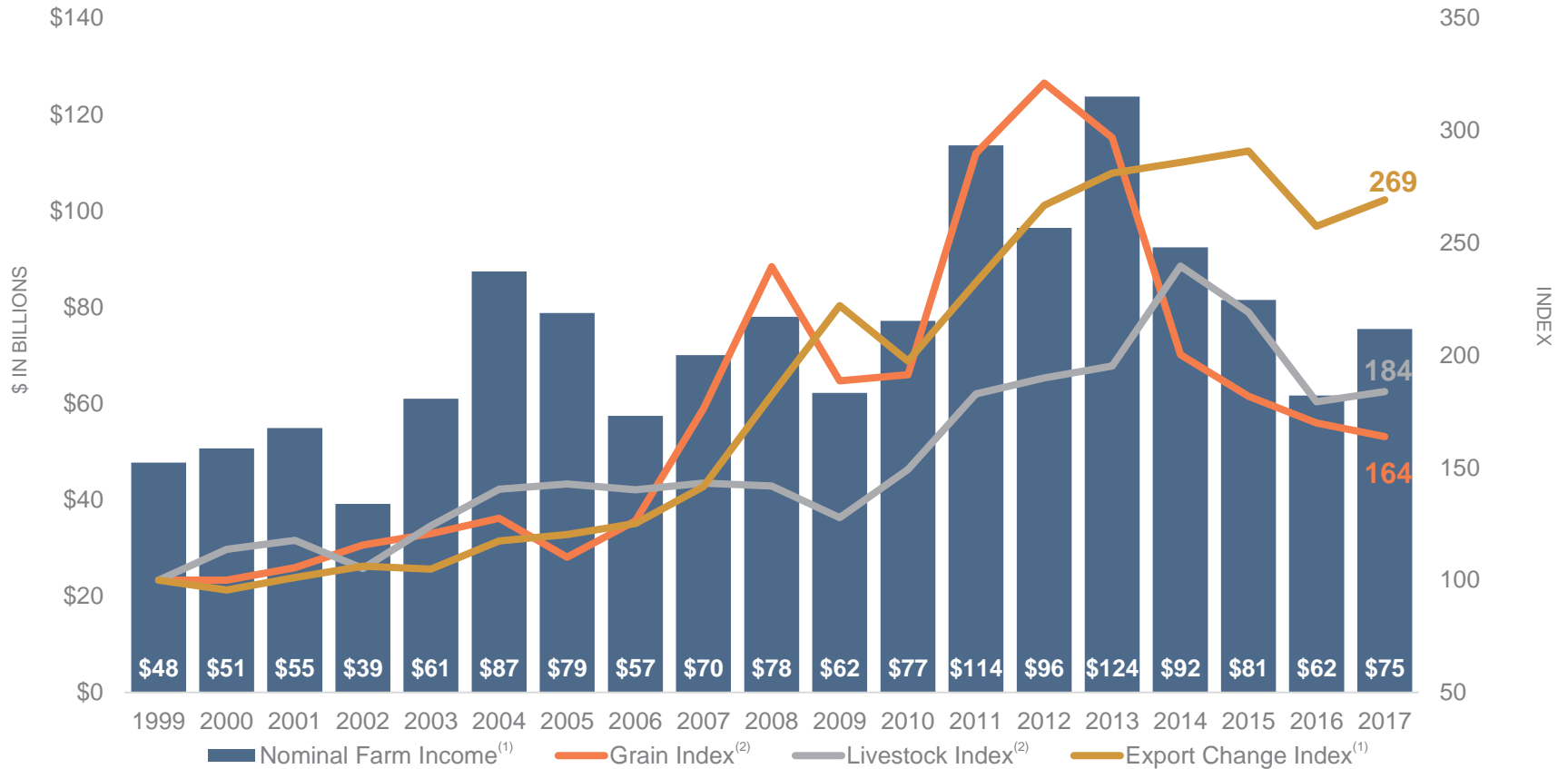
<sup>(3)</sup> Source: CFC 10-Q, nominal dollars as of November 30, 2017, Long-term Loans Table 6.

<sup>(4)</sup> Nominal dollars for 2016; Sum of FCS, non-GSE and Farmer Mac first lien RU cooperative real estate mortgage assets does not add up to the total due to the nature of Farmer Mac's secondary market business model.

<sup>(5)</sup> Source: National Rural Electric Cooperative Association.



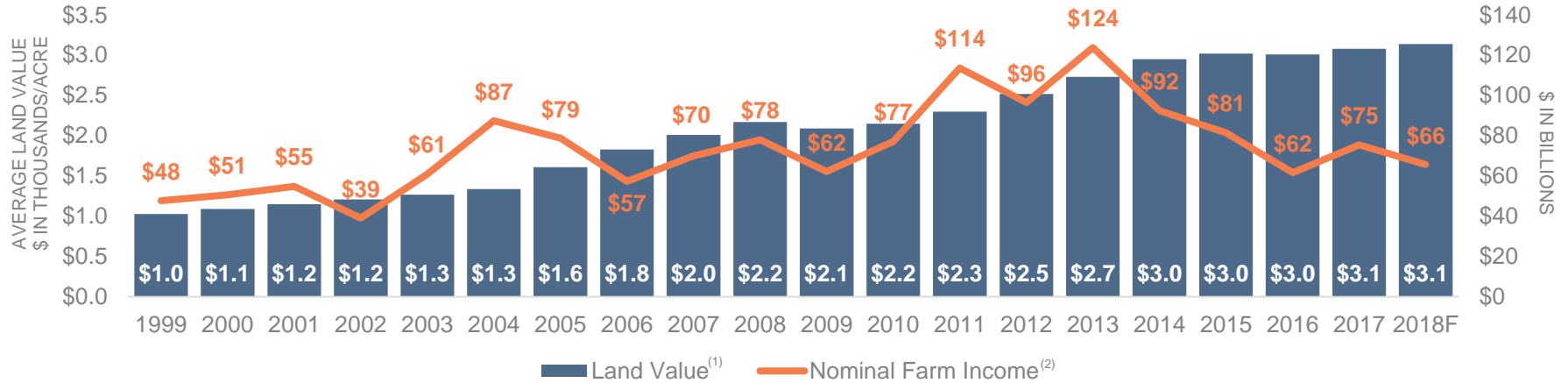
# Farm Income and Related Trends



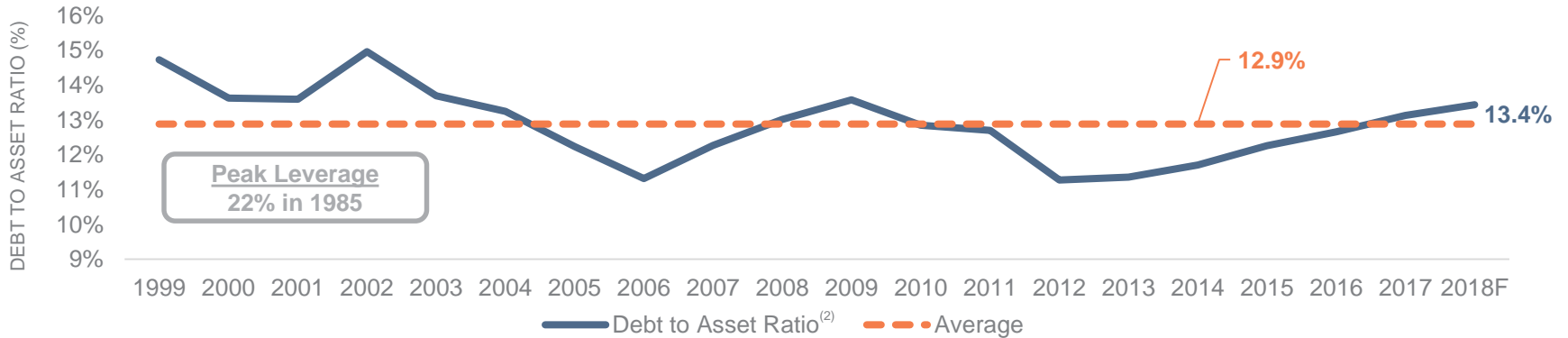
<sup>(1)</sup> Source: USDA, Economic Research Service, nominal dollars (as of August 2018).  
<sup>(2)</sup> Source: USDA, National Agricultural Statistics Service; Indexed to 1999 as 100.

# Ag Land Value and Leverage Trends

## Ag Land Values



## Leverage



(1) Source: USDA, National Agricultural Statistics Service, nominals dollars, (as of August 2018); includes all farm and pasture land, irrigated and non-irrigated.

(2) Source: USDA, Economic Research Service, nominal dollars (as of August 2018).

# Agricultural Risk Management Tools

**Farmers today use a broad array of risk management tools, many of which were not available or not accepted during the ag credit crisis of the 1980s**

- Many now view costs of hedging simply as a cost of doing business
- Have learned from their parents' experiences in the 1980s
- Risk management includes revenue and cost protection and more sophisticated asset liability management

## Revenue Hedging

- Crop insurance – more than 90% of planted acres to principal crops carry some form of crop insurance<sup>(1)</sup>
- Crop insurance premiums still federally subsidized and losses shared by the federal government
- Futures/forward sales – many producers use hedging instruments to sell grain crops forward at planting stage

## Cost Hedging

- Feed costs hedged with futures/forwards
- Fertilizer and fuel costs can be similarly hedged
- Water availability can be provided via “water banks” and secondary sources of water, e.g. wells
- Water costs can also be hedged with forward purchase agreements

**Debt service is better managed with low absolute leverage levels and better rate options**



<sup>(1)</sup> Source: USDA, Risk Management Agency 2016 Summary of Business, Net Acres Insured and USDA NASS 2017 Acreage Report.

# USDA – Key 2018 Forecasts <sup>(1) (2) (3) (4)</sup>

## **Demand for U.S. agricultural products to increase**

- Demographic trends and a growing global economy contributing to growth
- Lower commodity prices stimulating quantity demanded
- Despite trade uncertainty, USDA predicts total U.S. ag exports to remain high at \$144.0 billion in 2018 and \$144.5 billion in 2019
  - Continued strength in protein exports and higher wheat exports as U.S. helps offset weather issues experienced in other countries
  - U.S. dollar weakened in 2017, but USDA projects agricultural trade weighted dollar index to rise some in 2018

## **U.S. farm income to fall 13% to \$65.7 billion in 2018**

- Market facilitation program payments will offset some of the decline (not included in USDA's numbers)
- After price improvements in first half of 2018, trade disruptions and large harvests have pushed prices lower
- Livestock prices were higher than USDA initially expected in 2017, but pork, cattle and milk prices have eased in 2018
- Input costs are increasing modestly with lower seed and fertilizer costs expected to partially offset other increases

## **Average U.S. ag land values expected to stay flat to slightly higher**

- Declining land values in the Corn Belt have moderated slightly as of 2018
  - USDA data shows year-over-year increases in Iowa and Wisconsin
- Rest of U.S. remains stable to increasing – demand steady in non-grain producing regions
  - Quickest growth seen in Western and Southern states
- USDA projects 1.8% increase in year-end farm real estate asset values in 2018

## **U.S. agricultural mortgage market forecast to grow 4.4% in 2018**

<sup>(1)</sup> Source: USDA, National Agricultural Statistics Service, nominal dollars (as of August 2018).

<sup>(2)</sup> Source: USDA, Economic Research Service, nominal dollars (as of August 2018).

<sup>(3)</sup> Source: USDA, World Agricultural Supply and Demand Estimates Report, nominal dollars (as of September 2018).

<sup>(4)</sup> Source: USDA, Economic Research Service Trade Outlook (as of August 2018).

